

DESIGN OF AN URBAN HIGH SCHOOL;
The Process and Product of Form Generation

By

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Submitted to the Department of Architecture
on February 17, 1976
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The thesis project was to design a region of Charlestown's High School using the Program for Charlestown High School as written by Hill, Miller, Friedlander and Hollander. The thesis is full documentation of the process and the product of generating form for the region that comprised the Community Facilities and one academic 'House'.

The inputs into the design process that it touches on are the designer's personal attitudes, the program, the physical context, the social context, image making, organizational modelling, structural system, form rules and intentions and infill. Each of these general areas of input is described as to its importance in form making decisions. The final pages of the thesis are the drawings that document the final design product.

The process of designing a region is in support of my belief in the necessity for developing regions that are identifiable within the whole form of a large 'building' or place.

The design was built on the desire to legitimize the activities and learning that goes on outside the classroom by designing the distribution to enable a wide range of human association and use.

Thesis supervisor: Richard Chester Tremaglio
Title: Associate Professor of Design

"It must be conceived furthermore not as an isolated thing or isolated set of things, but as something which can be repeated on suitable places in the city. The city must be able to absorb it both aesthetically and physically; it must become part of the city's everyday fabric."

Aldo Van Eyck

TABLE OF CONTENTS

Introduction

1. PERSONAL ATTITUDE

2. THE PROGRAM

 Choosing the Program

 Using the Program

3. PHYSICAL CONTEXT

 The Region

 Built Settlement

 The Site

4. SOCIAL CONTEXT

5. IMAGE MAKING

6. PLACE MAKING

 Organizational Modelling

 Structural System

 Infill

 Form Rules and Intentions.

7. DOCUMENTATION

 Model photograph; overall

 Model photograph; house distribution

 Sections

 Plan at 40'6"

 Plan at 51'0"

 Plan at 58'6"

 Plan at 65'0"

 Plan at 71'6"

 Plan at 85'6"

8. BIBLIOGRAPHY

Introduction

I wanted to design an educational facility.

I wanted to design a small place.

It was my intention to legitimize the importance of the learning that goes on outside the Classroom by designing from the distribution.

It is always my intention when designing a large place to build identifiable regions within the whole.

The program I chose was for 1000 students , 150,000 square feet and a High School. For the purposes of identity within the whole it was broken down into groupings of 250 students with 10,300 square feet.

As I built up the three dimensional organization of the whole place One region began to have some identity. It included one 'House' and much of the Community Facility area; auditorium, music, cafeteria, administration, merchandising and guidance. So I worked primarily on the design of this region.

As I worked the importance of its connectedness to other regions became increasingly apparent. If I were to start again now I would design the entire school with the region already worked on as a reference and a starting point.

What follows is a description of the input into the process and documentation of the final Design for a Region of Charlestown's High School.

1. PERSONAL ATTITUDE

My basic attitudes guide and shape my Form Generative Process and Product.

I am an idealist. I believe in the potential for positive growth and change in the Individual and their way of relating to society. I am also a realist. Growth and change are difficult because of the conflicts within and between individuals. Therefore I design for the world as it could be relative to what it is.

Some years ago I would have argued that a school for Charlestown is not necessary or desirable, that education should, as it clearly does, go on everywhere and what is needed is a societal framework into which the younger citizens can plug as apprentices in a transparent and plastic world. High School then would be merely an administrative subset of society. I do still wish for a more transparent and plastic world but I do not believe in the totally decentralized world as teacher model especially for High School. I think the Center, the Institution, plays an important role in the adolescence of most young people. For many it is a testing ground between the time when the Family is the Center and the Self is the Center.

Learning in schools has officially and physically been contained in the classroom. The cool grey corridor then moves from one container to the next. This public zone has been ignored for its educational and social value. The built form of the distribution could help legitimize the learning that goes on outside The Classroom.

So I began this project believing that High School in Charlestown can be something more than a physical disciplinarian and that it can legitimize the growth and change that is going on in the Corridors and the Classrooms. The Program for Charlestown High School, developed with the Community, reinforced this belief.

2. THE PROGRAM

Choosing a Program

For the purpose of a one semester project I wanted to enter the Design Process somewhere at the start of Form Generation or Physical Design. That meant leaving Community and User involvement out of the process. Therefore I chose the Hill, Miller, Friedlander and Hollander Program for Charlestown High School because it was the result of sincere and powerful Community and User input.

I chose this program also because it is a projection not for a building for the status quo Boston Public School System High School but for an educational facility in the world as it could be. It pushes the boundaries of the traditional High School.

It is based on the wish to achieve informal, highly personalized education. The sizes of the learning groupings ranging from 2 to 30.

It has recognized the need to group students in some way that allows them to feel associated with an identifiable group within the larger school.

It speaks of the importance of the learning that goes on outside the classroom.

And the school is programmed as a resource to the community.

Using the Program

There are three categories of information in the program: Aims, Spatial Organization and Spatial Requirements. Although all of this information was mutually informative each category had a primary function in the Form Generative Process.

AIMS helped me establish the formal 'attitude' of the building regarding the internal and external continuities and discontinuities.

SPATIAL ORGANIZATION helped me determine patterns for distribution, uses and regions thus generating the basic framework.

SPATIAL REQUIREMENTS were the determinants of the generic sizes to be built into the Framework and the specific sizes to be determined by infill.

AIMS of the Program

What follows is a list of the major aims set forth by the program and how I interpreted them into form generative concepts.

1. Alternate education will strive to demonstrate to the student that learning has its own rewards, that learning can be interesting and that learning can occur in almost any situation especially outside the classroom. The built form of the school must legitimize the fact that learning can go on in many places and at many times in school and out.
2. School must develop academic skills and competence to continue learning after school. The school must be a model of transparency and plasticity.

3. High School must provide a variety of educational experiences that will map the world that the student will know. There must be some physical continuity and association between school and world.
4. There must be active student participation in the regulation and creation of the school environment. The physical elements of the school must be changeable and useable in many ways.
5. The school should be integrated with the larger community. The form and uses of the school must have a reciprocal relationship with the Community.
6. Mini-courses should be outgrowths of experience in class and life. There should be areas of claimable space associated with the classrooms and the distribution.
7. The objective of the organization of spaces within the new Charlestown High School is to encourage the AIMS. It should enhance the development of flexible , alternative teaching and learning techniques. And it must encourage the informality and community so necessary to support the developmental needs of young people. The building must enable a whole range of uses.

SPATIAL ORGANIZATION

Briefly, as the program describes them, these are the five major "components of organization".

1. HOUSES

" The main academic areas of the school are located in four 'houses' of about 250 students each. The house functions are composed of two subunits: 1) general purpose classrooms and 2) resource units."

"All classrooms which are not specialized in some way are divided among the four houses with seven classrooms to each house. Although each classroom is assigned to a subject area and are thus specialized to a minor degree, all (except Biology) are essentially functionally interchangeable."

"The objectives of greater student class participation and more egalitarian student-teacher relationships are reflected in a more informal and less hierarchical layout usually found in conventional school environments. There is a conscious effort to deemphasise the conventional school layout with the instructor in a preeminantly dominant position, although the lecture layout is provided as one option."

"The resource units, the second component of the houses, include:

- a. interdepartmental Center
- b. student common, study and work rooms
- c. house offices
- d. guidance offices
- e. locker and storage space "

" The interdepartmental center includes the offices and work room for approximately 15 teachers assigned to each house, the work room is the primary area of contact and interdisciplinary curriculum planning for teachers. It is also used for student tutoring and student teacher consultation."

"Student spaces include a large common room for informal teaching and student use including lounge furniture, vending machines, music cubicles and game equipment. An independent student study space provides convenient quiet space for study and reading. A work room serves as an area for the preparation of various school and extra-curricular materials."

"Each house has a housemaster and guidance counselor who are provided with their own offices. A conference room functions as a space for staff meetings and small seminars."

2. MEDIA CENTER

"Those functions associated with various school media are housed in the Media Center. These include:

- a. school library stacks and reading room
- b. audio-visual distribution center
- c. television center
- d. listening and AV previewing rooms
- e. graphic production spaces
- f. main teachers' lounge and professional space
- g. student activity area "

"The media center is the integration element between the houses and within the school itself. It is so located to be immediately accessible from the houses."

3. SPECIALIZED CORE FACILITIES

"Those academic spaces which need to be highly specialized and thus are not interchangeable are located in the Specialized Core Facilities area. These include:

- a. science labs and services
- b. home economics labs
- c. business education classrooms
- d. industrial arts shops
- e. language and reading labs."

4. COMMUNITY FACILITIES

"Those functions not directly related to academics are assigned to the Community Facilities area. Exceptions to the are the merchandising store and music facilities, the latter needing to be located near the auditorium stage and performance areas and because of noise involved in music coursework and practice."

"The spaces in the Community Facilities area include:

- a. administrative, guidance and health offices
- b. special services
- c. auditorium
- d. dining and kitchen
- e. music
- f. merchandising store."

5. PHYSICAL EDUCATION

"The facilities for P.E. are located across Medford street from the high school building. They include a physical education building for indoor activities and various playing fields for outdoor organized and unorganized activity. The physical education building will be connected to the main academic building by a covered walk spanning Medford Street. During non-school use the community will have use of the building for various recreation activities."

"The outdoor fields are situated next to the physical education building on a site adjacent to the Little Mystic Channel. They include football and baseball fields, tennis and basketball courts, a play lot, bandstand and boat launch."

SPATIAL REQUIREMENTS

As I concerned myself primarily with the design of a region that included one house and the community facilities I have only listed the spatial requirements of those.

HOUSE

Classrooms:

English	800
Social Studies	900
Math	800
Foreign Language	800
Art Studio	1200

Interdepartmental Center:

teachers' workroom	300
teachers' individual work area	700
storage	100

Resource Unit:

house person's office	150
outer office	70
guidance	200
conference room	200
commons area	200
independent study	400
work shop	250
lockers	

COMMUNITY FACILITIES

Administration	1850
guidance	1050
health	1050
special services	1840
music	1760
auditorium	7300
dining	3650
merchandising	1500

3. PHYSICAL CONTEXT

Physical Context; the region.

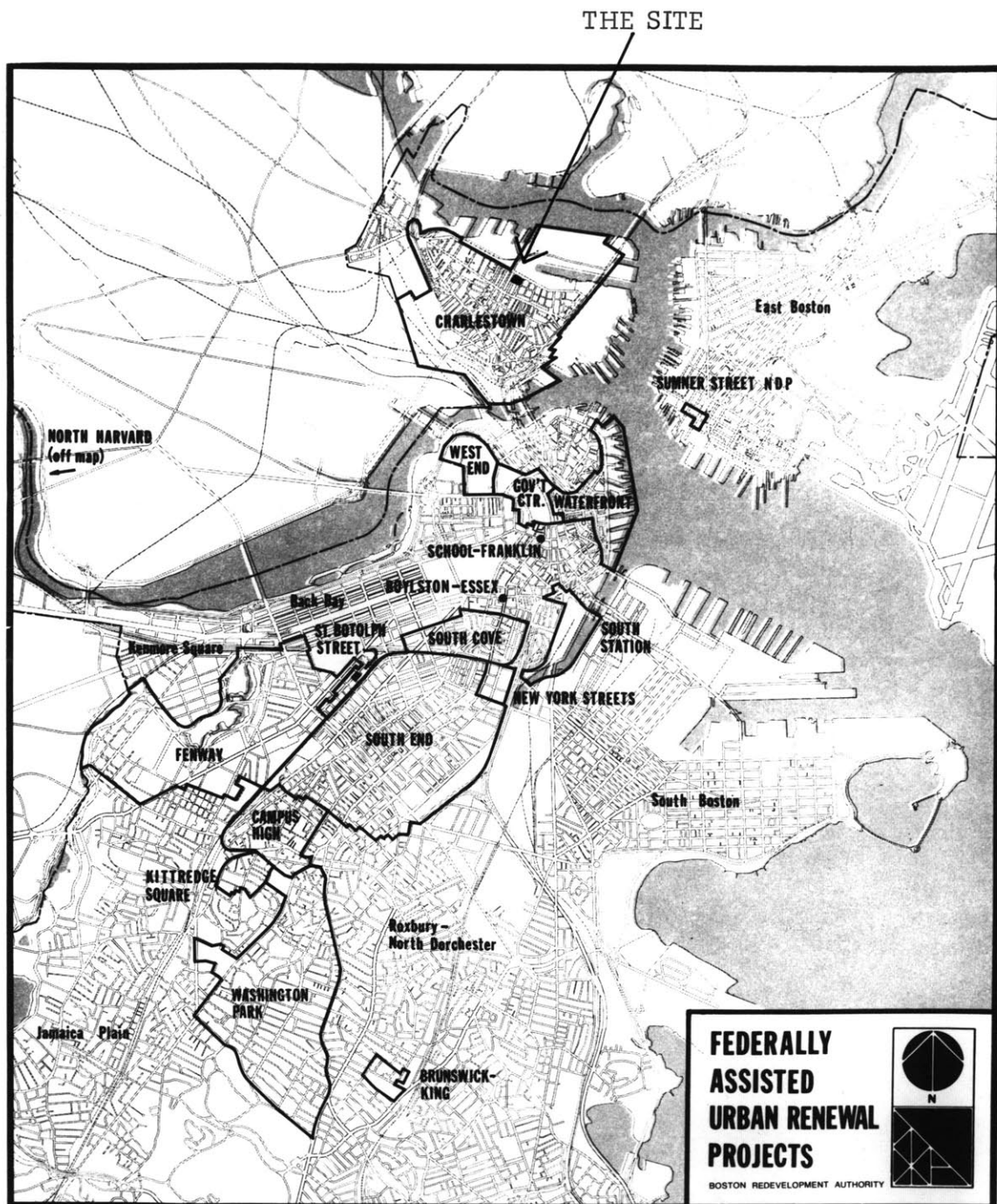
Charlestown is physically isolated from but visually continuous with its surrounding urban region of greater Boston.

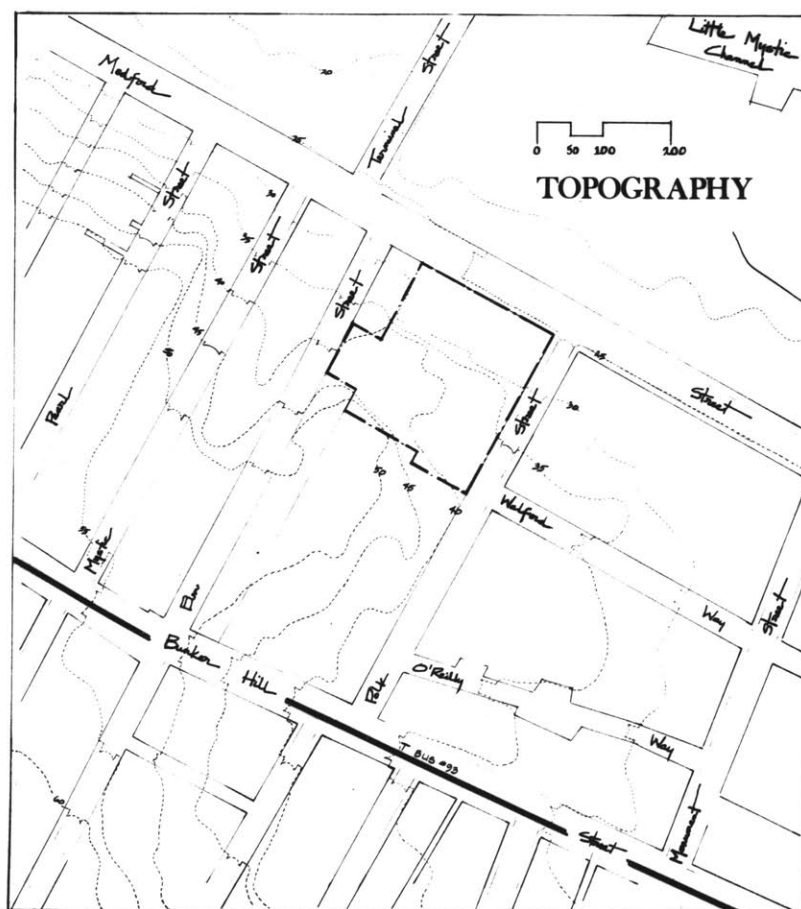
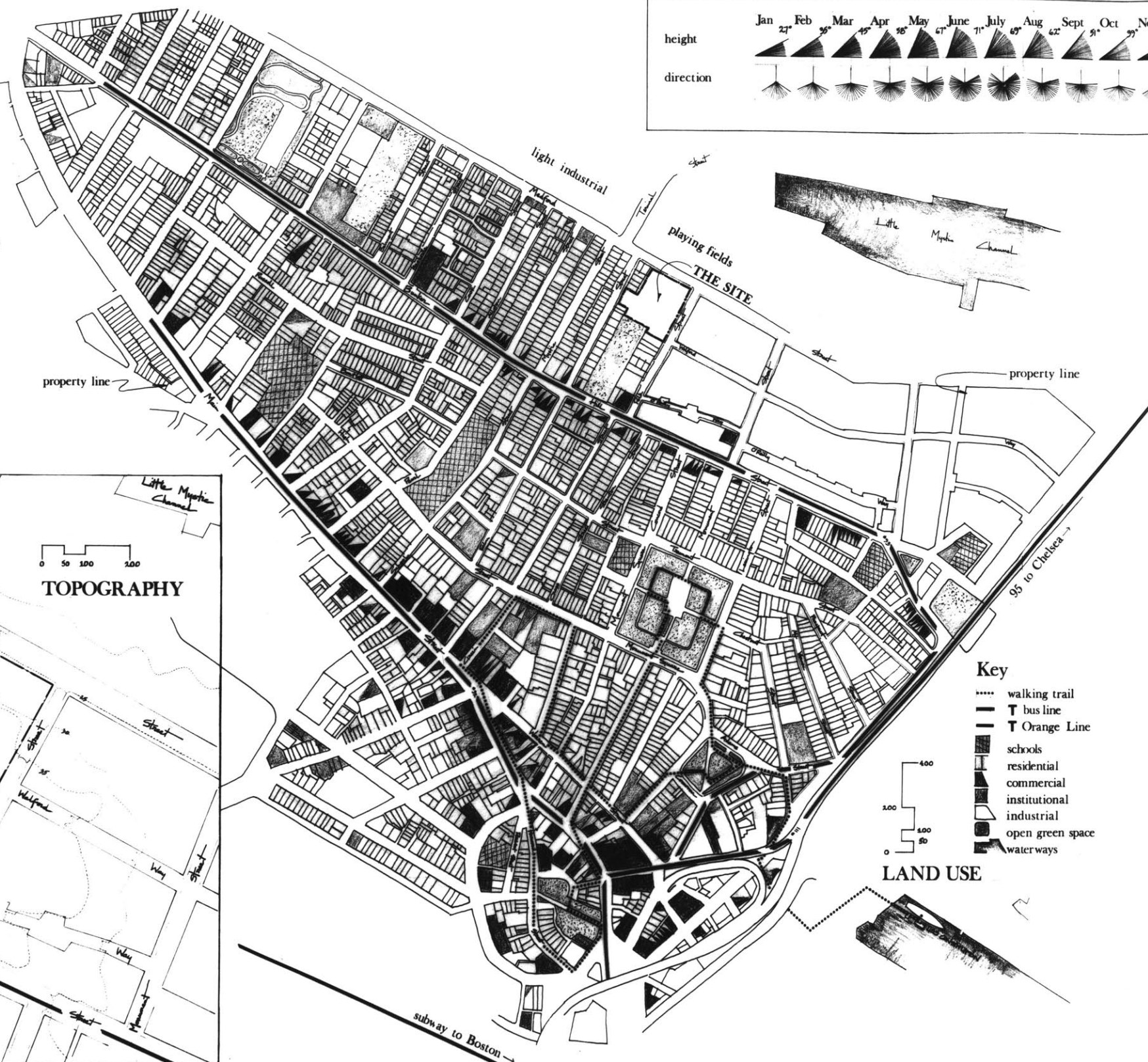
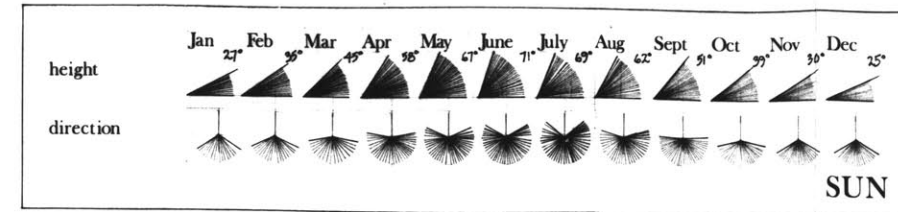
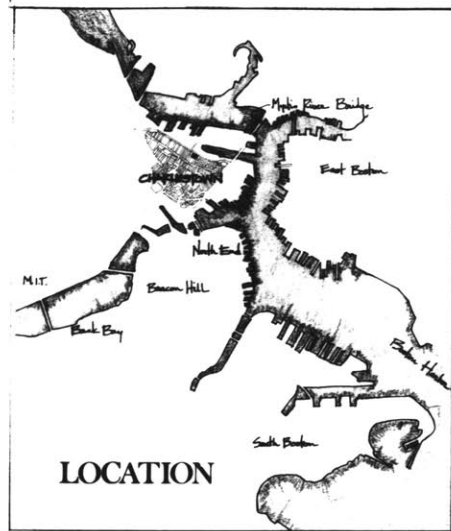
Charlestown is a peninsula. During the Revolutionary War major approaches were made from Boston by water. Now that water edge has become harsh and impenetrable. On the East is the main N-S route from Boston, the Mystic River Bridge and its tangle of ramps. On the South the I 93 and the Elevated have served as separators. Both of these high speed linear elements in the fabric have become the backbone for much of the 'Redevelopment' in Charlestown. New housing projects, replacing old neighborhoods, cling to them.

Although what **Peo**ple have done around Charlestown has physically isolated it from the rest of Boston, the Topography of the region allows Charlestown to remain **visually** continuous with the whole region. Charlestown, is like many of the other strong areas in Boston, settled on a glacial drumlin. As one walks along Bunker Hill Street, a wide E-W street, often there are high points where one can see off through the narrower N-S streets to Boston, to Beacon Hill, to the Harbor, to the Docks or even beyond to Telegraph Hill South Boston. From the top of the Bunker Hill Monument one has one of the most unobstructed views of Boston and vicinity I've ever seen.

Charlestown's situation had a powerful effect on the way that I thought about the project. From the very start I had the desire to get the building up so that there would be some of the visual continuity with the environs that one had in the streets. It became a goal and it seemed to me one way of making some of the links between High School and Beyond; a representation or a symbol but nonetheless I think important physically and associatively.

Physical Context; the region.



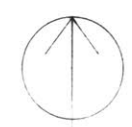


- Key**
- walking trail
 - T bus line
 - T Orange Line
 - schools
 - residential
 - commercial
 - institutional
 - industrial
 - open green space
 - waterways

LAND USE

Design for a Region of Charlestown's High School

Daphne B Petri
MIT
M Arch Thesis
January 1976



CONTEXT

Physical Context; built settlement patterns.

In Charlestown the main wide roads run E-W along the contours and the smaller roads run N-S across, or up and down, contours. This is a settlement pattern that one sees and experiences in many cultures. Even cows, mooing and ruminating on a grassy hillside, make trails that are very deep and wide along the contours and only leave small tracks moving off, up or down. It seems right then that this characteristic is a good form rule when dealing with a sloped site.

The block structure in Charlestown allows maximum access to the N-S



streets and yet affords them some privacy as they are so long and narrow.

The only breaks in the pattern are occasional square blocks which have alleys in to their interior, places where the slope gets so steep that the end of a street becomes a set of stairs running up the hill, and the introduction of industry or institution. The result of it being so ordered is that it is very easy to get around Charlestown because the distribution is predictable.

The physical form that defines the ways through is also very predictable. The buildings are seldomly more than three stories high. Often they are the result of row house development so there may be a whole long block of the same housing. However much of this housing is owned and therefore similar as the basic form may be one house is always differentiated from the next by color, materials or details. Many sections near the Bunker Hill Monument look very similar to the housing in the Back Bay. All of this gives one the feeling that the people here want their house to be recognizable.

Thus the scale and organization of Charlestown are very associative.
The school must add to this in a positive way not take away from it.

Physical Context; the site.

The site for the High School is on the North slope of the Charlestown drumlin south of the Little Mystic Channel. It is on the corner of Medford and Polk Streets; Medford being one of the main E-W roads edged by light industrial and residential and Polk being the street that marks the end of the dreary old 50's housing development.

The site slopes from a high sothern elevation of 50 feet at the Bunker hill Burying Ground boundary to 24 feet at Medford Street.

Whether because of the unfavorable orientation to the sun or to Boston this side of Charlestown has grown up to be industrial and project housing. There is almost no point in this corner of Charlestown that is as nice as the worst residential area on the South side.

So the site has some identity problems. It is on the most dreary corner of Charlestown and it is itself a north facing slope. Not only that but its very imediate edges are very different in character. To the North is the Physical Education Facilities, industrial buildi ngs and the Little Mystic Channel. To the East is one of the first housing projects in the city and it is presently a wasteland of unsympathetic, unkept housing with very few amenities . To the South is the Bunker Hill Burying Ground; a tumble-down historical cemetery. To the West are small row house dwellings that are characteristic of Charlestown.

In my first visits to the school site it was clear that all the edges of the site needed to add to the existing fabric.

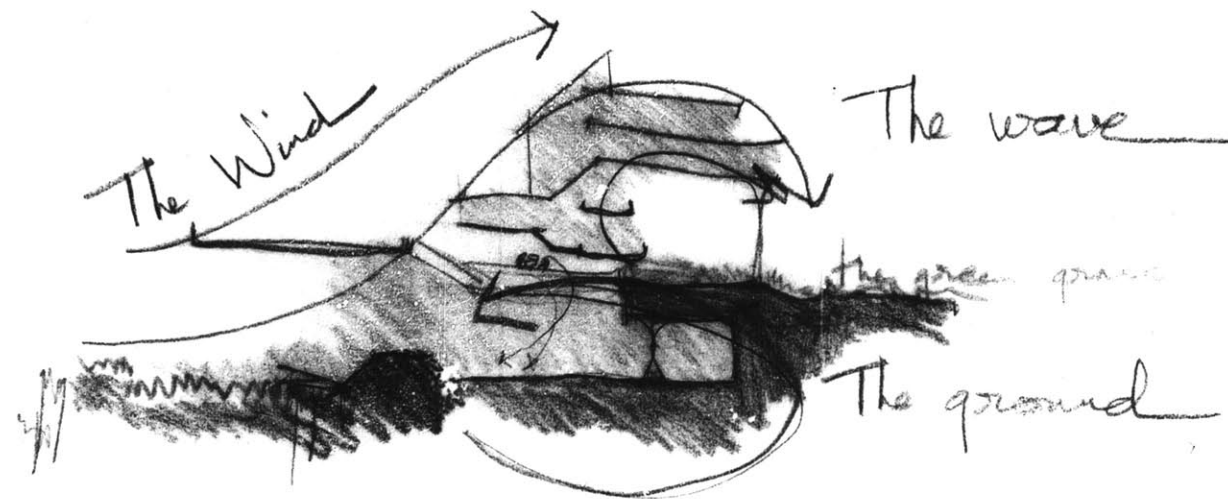
The South edge came first. In conjunction with trying to get the building UP to get some regional association it became natural to want to get some sun and some ground into the site in a reciprocal fashion. At this edge then it is convenient to bring some of the green ground of the burying ground into the center of the school thus also opening an area for sun penetration. The diagrams that follow on the fold out page represent the major intentions for the sun, ground, wind and view as they relate to this edge.

The housing project to the East seemed to me to be in need of some associative edges. I therefore wanted the east edge of the High School to have some built edges that might be used by the residents. This might be done physically and it might also be done by placing the community facilities on this edge.

The North side of the site has a primarily High School focus; the physical education department. There was a programmatic dictum for a bridge across Medford street and it also became my intention to make the school strongly associated with the fields and P.E. activities.

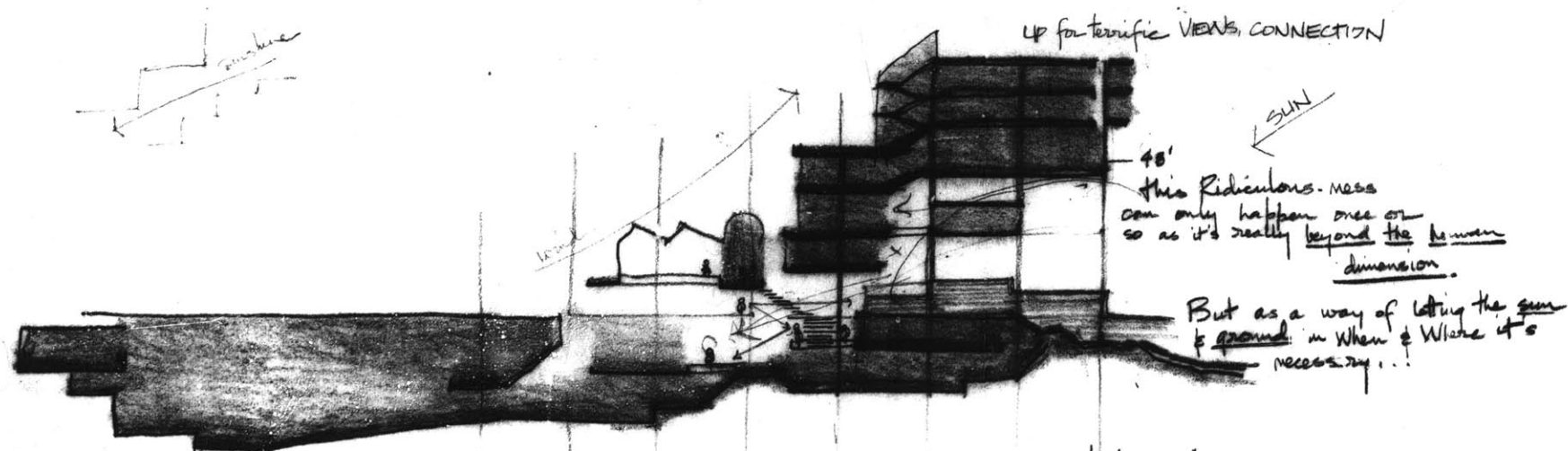
The West edge is on a quiet residential street and it was my intention to keep its involvement with the school very low. There would be a way to get in there but there would be no focus for lingering or hanging out there.

The site has an Area of 59,862 square feet.



October 6

3



October 6

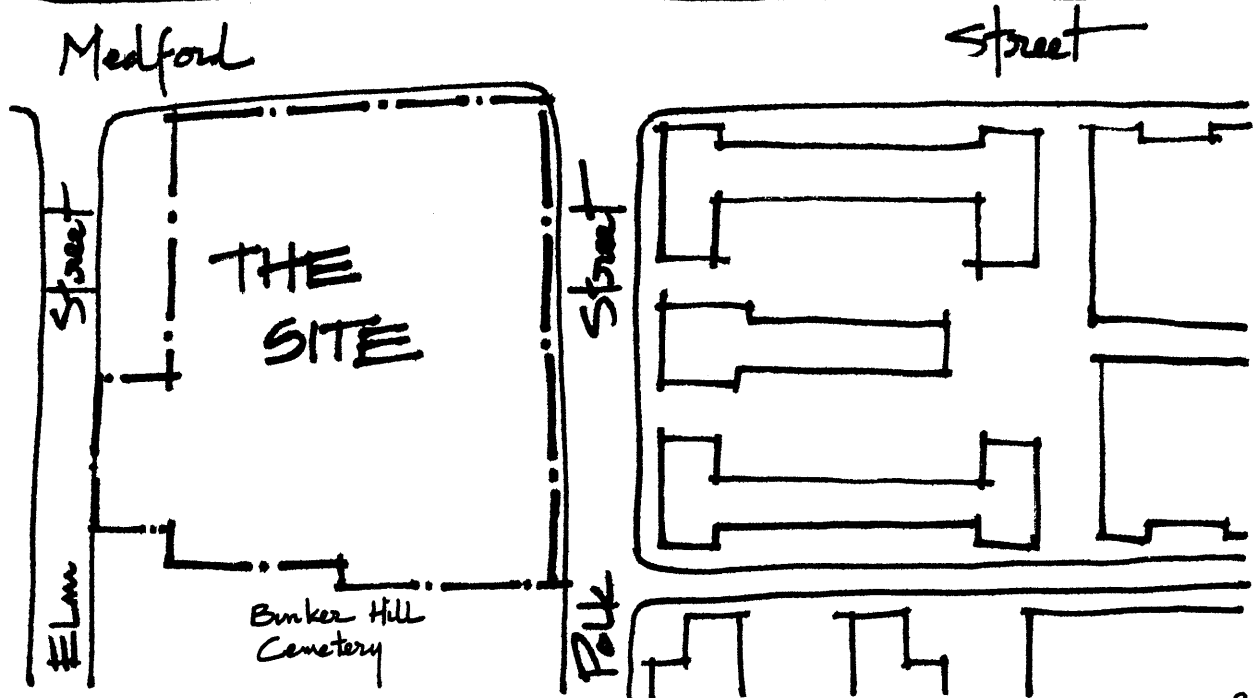
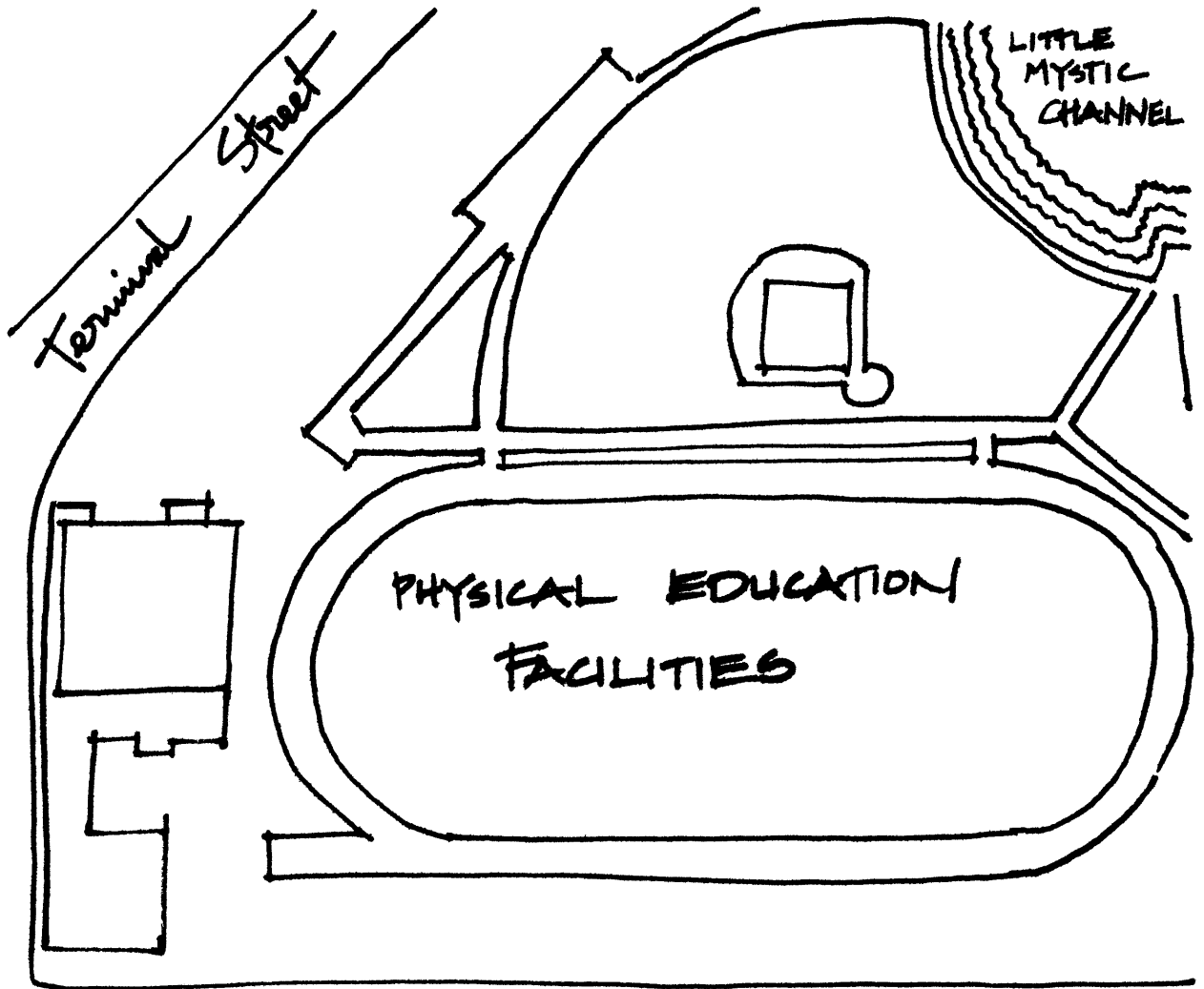
6

GROUND
SUNLIGHT & AIR
HEIGHT
ORIENTATION

Southern Edge
Diagrams

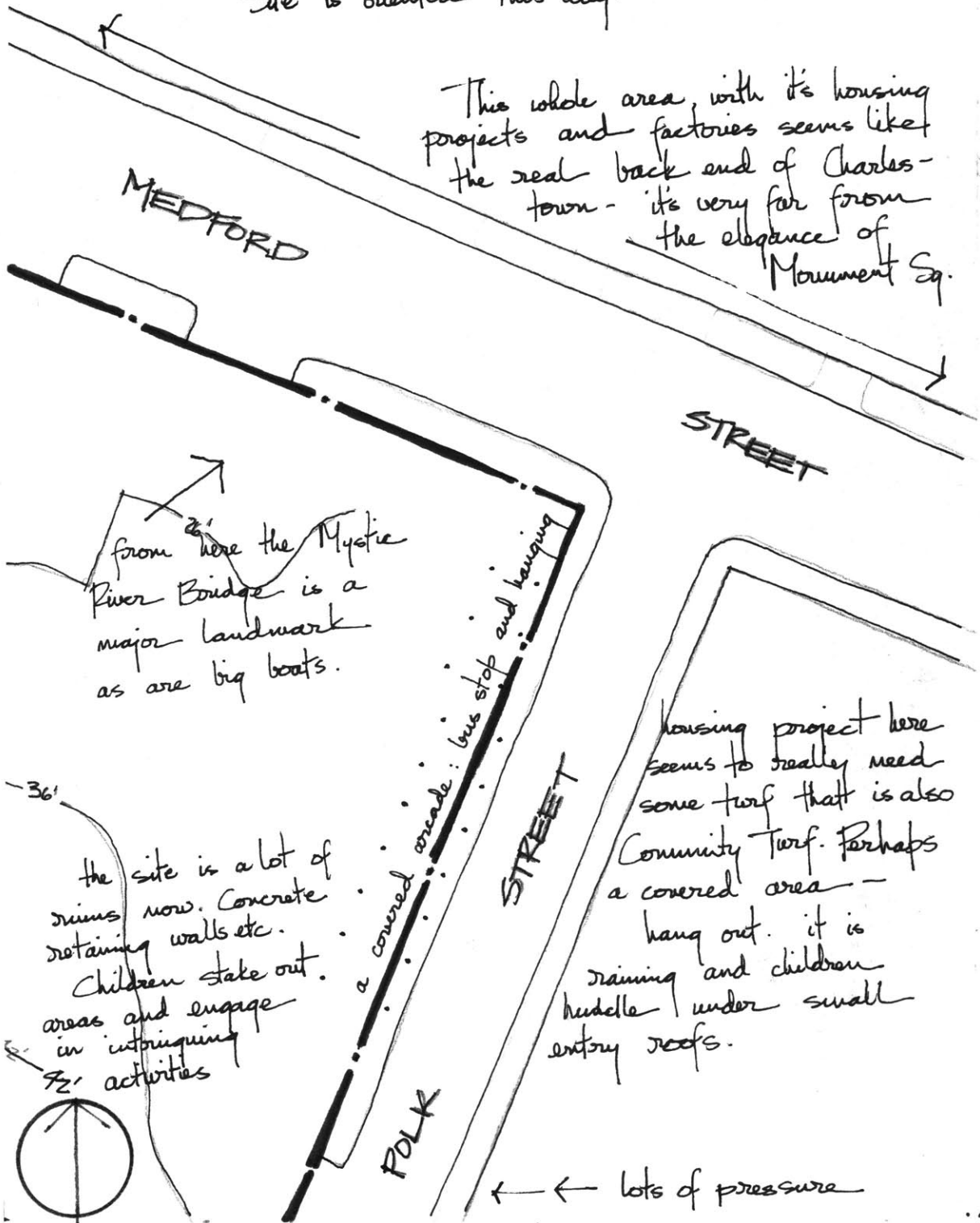
Sun
Ground
Wind
View

NO SCALE

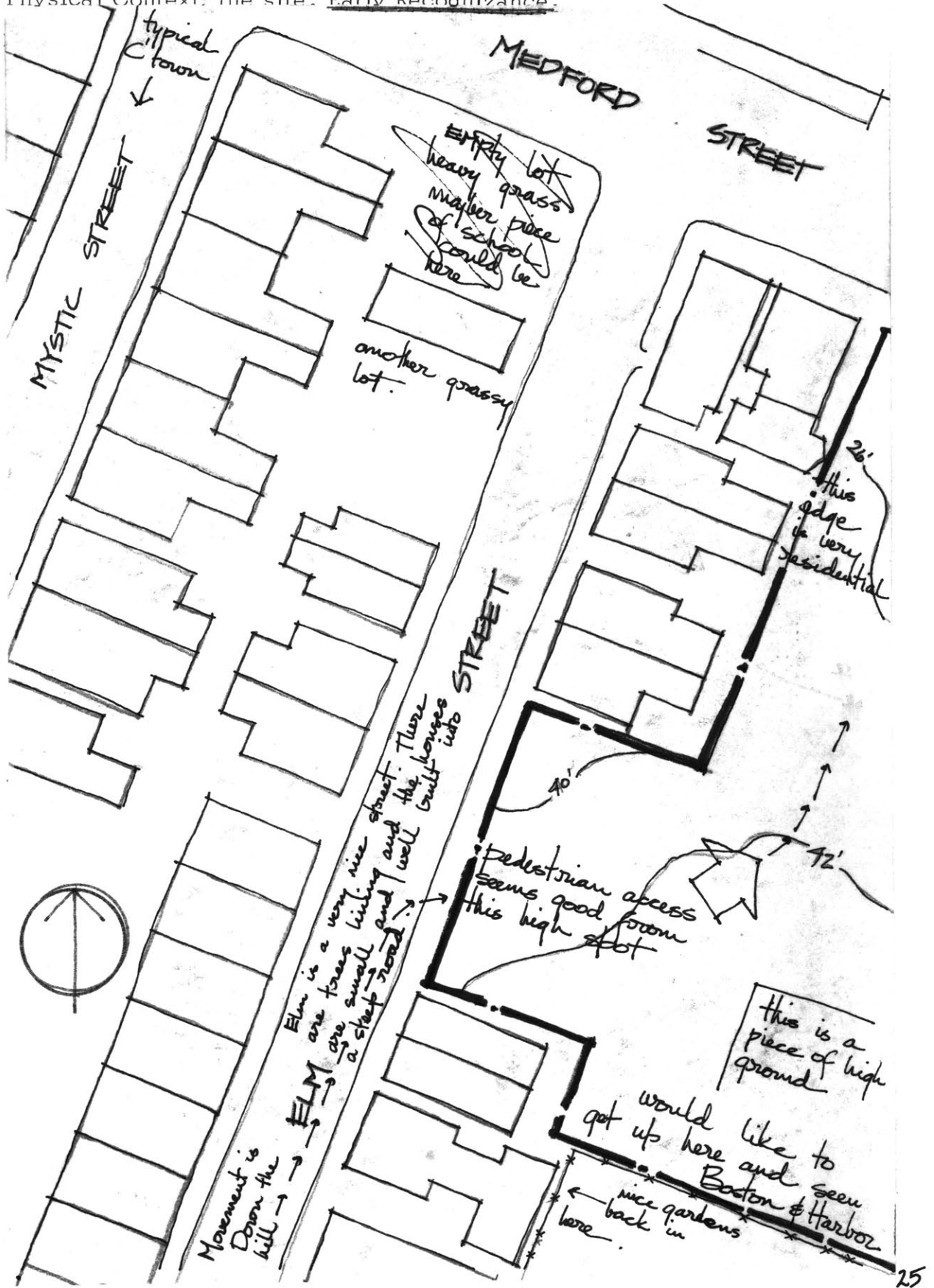


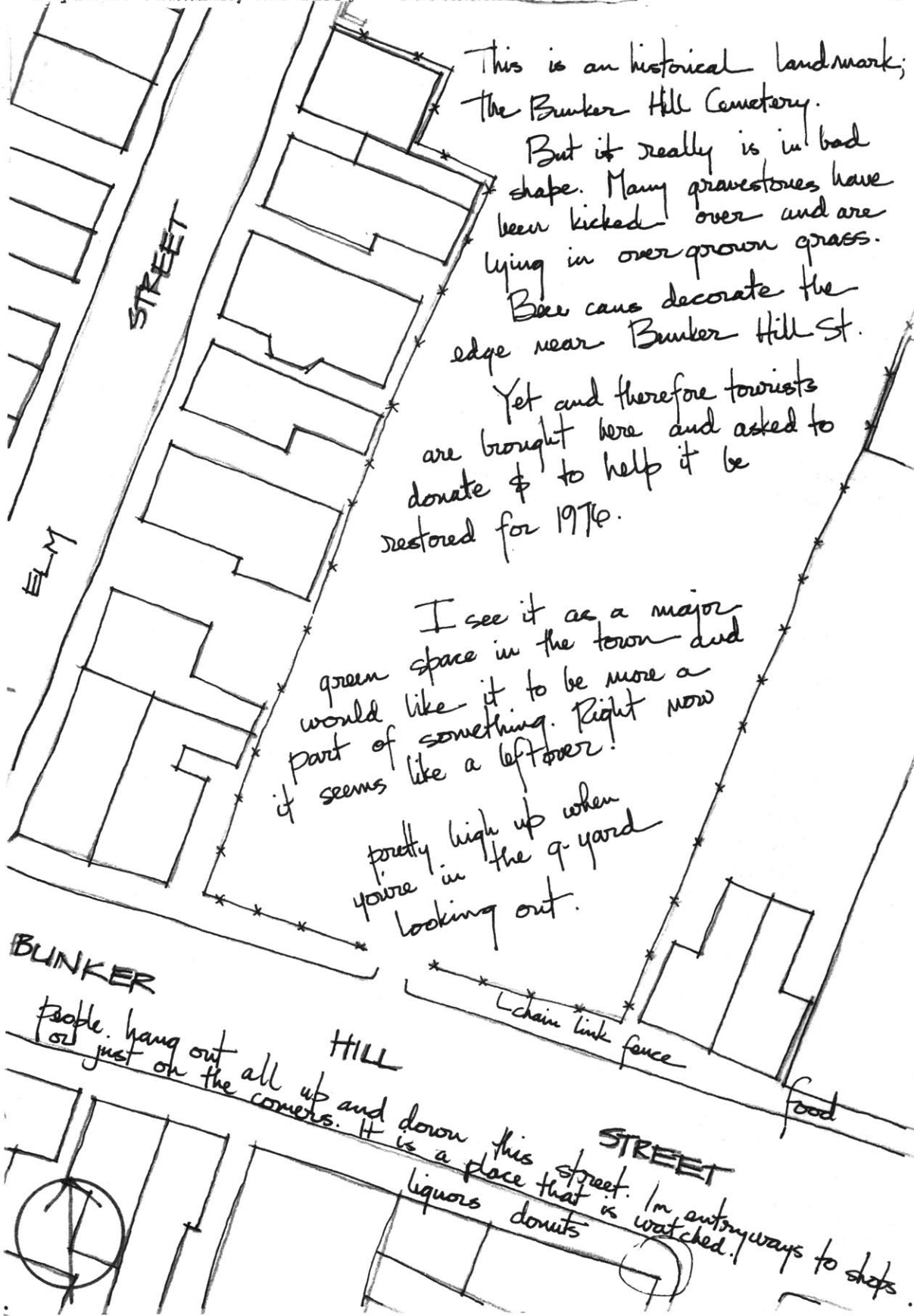
P.E. Playfields will be here with good water edge at Little Mystic Channel.

Site is oriented this way.



Physical Context: the site. Early Recognizance





4. SOCIAL CONTEXT

There is something very outwardly pleasing about being in Charlestown. Like the North End Charlestown has maintained and strengthened its identity over time and through many confrontations with the Boston Redevelopment Authority. And now Charlestown is struggling with Judge Garrity over the Court ordered desegregation. All of these factors have influenced the way people are there. This is from my first walk around Charlestown:

"Charlestown may only be at its doorstep because of the strong anti-busing sentiment of the moment, but everywhere there are people sitting and watching. What? For Whom? Kids are gathered in various ways; some girls and boys; the boys with a football and the girls with tight pants and cigarettes. Then there were the groups of boys at the corners; always at the corners, where they could really watch."

"A young couple sat on their front step talking."

"A middle aged woman sat at the edge of her property in a folding chair, smoking a cigarette, holding an umbrella over her head as it was raining. She stopped and talked to passing motorists."

"Six young children huddled under the 4' x 4' overhang at the door to the housing project building they lived in. They were trying to play cards out of the rain and out of the house."

"21 people crowded into the entrance of the Charlestown Info Booth."

"Charlestown is at their doorstep."

A great deal of the energy that is Charlestown comes to be channeled into their institutions; such as the High School. The High School has been a symbol and has helped to hold groups together. It is for many the last school they will attend and for the 60% that never leave the Boston area it will remain a local association. For the 35% who stay in Charlestown High School will remain in their realm for many years after they graduate.

Yet to date Charlestown has never had a High School building that was physically penetrable after graduation.

Given that the new program has in it alot of community uses and that I am generally sympathetic with the importance of making a return to a place that might bring back painful memories more comfortable, it seems important that this new school be more open and more associated with the community than other schools. People must feel that this place will have some lasting importance and will have significance beyond adolescence.

On being young in Charlestown Hanging tough



By Robin Reisig

Cops are chasing us with motorcycles, no one knows why. We race for the sidewalk, and the cycles follow. A motorcycle rams my leg. This is the beginning of school in Charlestown this year — peaceful and "wonderful" — unless you were there.

For the kids in Charlestown, it was a time when police snipers strode the roof of your school, when cops on the street stared at you in your bathrobe when you opened your door to get the paper. Helicopters woke you up early in the morning, and cops ordered you off the corner where you had always hung out at night. If you lived on a bus route, you might even need a permit to walk outdoors.

So the kids stayed out of school — because it was a good excuse to play hockey, because they "hate niggers," because they love Charlestown.

"You got to be tough. Only the tough survive. Survival of the fittest," one kid said. "You got pride. You're from Charlestown. If you fight people from out of town, you don't want them to say, 'We beat up some pussies from Charlestown.' You want them to say, 'Oh, we fought some real tough kids from Charlestown.'"

'If we were niggers,' said one young man, 'He'd probably be a fireman, I'd be a cop. They don't take advantage of all the privileges they get.'

Monday Through Friday

The first Monday set the pattern. The high school was inaccessible at the top of the hill, so the kids and some adults milled around at the bottom, on Bunker Hill Street shouting at distant buses. "And the poor little black kids were waving," said one woman. Jim (some names in this story were changed, at the kids' request) complained he wasn't let into school because he didn't have his lunch. You used to be allowed to go home for lunch, until the busing. "Only the niggers get free lunches."

"Fucking pork chops and black-eyed peas," one kid draws in imitation of a Southern black accent. "Say, brother, what's happening?"

"I wanted to pick up a hooker," one kid grins. Another points to a small boy. "You think he should go to school with them? They'd make mincemeat of him."

A teenage girl sings to the tune of a Burger King commercial: "Pull the trigger. On the nigger. Have it you-r-r way..."

"If no one goes to school, they'll have to drop this damned busing," one kid concludes.

Another student complained they wouldn't let him in because he was half an hour late, out watching the buses. "The niggers went in late, so why can't we?" He was late, he explained, because he had thought "we could do stuff outside." What stuff? "Bottle the buses."

"Oh Jeeze!" screams a woman, as a black dummy falls, hung from the three-story project roof. The dummy is pulled up, and dropped twice again. Each time it looks less human, as its form becomes disassembled. One leg sticks out at a disjointed angle. Then the dummy is burned in the street.

"Hell no, we won't go," the kids sing, like antiwar demonstrators, as they sit in the street. Cops come, kids run, bottles smash in the street.

"There was no need of this," Pat Russell of Powder Keg, a local antibusing group, tells the police captain after the first police rush. "He pulled my tit down. We weren't

(Continued on page 22)



Hanging Tough

(Continued from page 19)

doing nothing. There was no need." There was no need, I added silently, for the motorcycle to run up my leg.

"This is America?" a man asks no one in particular. "I don't like this," says Jim, who had earlier joked about hookers and rooted for violence. "I never saw so many cops in my life."

Peggy King is pushing at the sky, waving away the helicopter overhead with all her might. "I hate the whole situation," King says. "It makes me feel we're at Kent State." They bused "the whole project. I can't understand. Is it because we're poor the whole project got shipped out?" She adds later, "I lived in Charlestown and South Boston and I fought my way through school. The same thing I'm going to teach my kids. They have to kick asses." But in King's world, she says, the code was "Use hands, don't use anything else."

Soon small hands of kids are being broken into smaller hands, then one huge crowd swarms through the hilly, winding streets overturning a few cars and burning a local resident's car, and passing through the community college at the other end of Charlestown. By the time the cops catch up, the kids have already left the community college and crossed back across the road. One exhausted follower observes, "The kids have tactics." At the community college, a few pieces of furniture were turned over, and one black student had his arm hurt.

Tuesday morning, a block from the high school's back entrance (the front is cordoned off and reserved for the blacks bused in), two kids with their lunch bags debate whether they'll go to school. Their friends urge them to stay out. It'll be a long day if they go. "Garrity ordered school till 1:45. At first it was going to be around 12:58 or 12:08."

"1:45"

"Someone's going to kill Garrity!"

"By this afternoon there's going to be a riot there."

"Now you can't even go out for lunch. You got to eat in the dusty shop room. It's really dusty. How can you eat?"

They decide to skip school. "It's an excuse," says one. They walk down to a vacant parking lot at the end of the street and smoke some "dust," which they describe as "mint treated with all but two of the chemicals of heroin." They try to figure out how much they can get for the "hot box" they got last night. They figure they'll each get \$25 for the tires.

"I got \$400 for the old car," one boasts of a recent exploit. Usually it's too much trouble to sell the whole car, another explains. The buyer has to peel the numbers off the engine and go to a junkyard and get numbers from the same kind of car.

"Now they wonder why teenagers drink."

"What else is there to do?"

Last night's hot box was already stolen, they figure, since its ignition was already popped. "We found it. You get 25 bucks for doing nothing."

As we walk back up Bunker Hill Street, two older boys tell them they shouldn't talk to me. They tell me, "Go to Roxbury and get raped by a nigger."

"You stay, you're going to get heat," an older boy taunts. "My sister comes, you going to get beat."

He pulls open the zipper of my purse, gingerly. Then he zips it part way shut again.

"Yeaaa Belfast!" a boy shouts, as the mothers and children assemble to march in prayer.

"Martin Luther King did it in silent prayer. The mothers of Charlestown can do it in silent prayer," says Pat Russell. "Yea!" says the crowd.

As the marching, praying mothers approach the high school, their path is blocked by two tight lines of police, backed by 12 policemen on motorcycles. Around the corner mounted police wait. Two paddy wagons pull up.

"You have no permit," says a cop.

"You'll riot our town," says Pat Russell.

"I lead us not into temptation, but deliver us from evil," says the crowd. A small boy

runs from the sidewalk to hold his mother's hand. At the front of the march a three-year-old blonde girl carries an American flag. Soon it is replaced by an Irish flag.

The women sing "He's Got the Whole World in His Hands," "God Bless America" and "We are the Girls from Charlestown." We're noted for our wisdom and the clever things we do. Most everybody likes us. We hope you like us too. Stand up and cheer for dear old Charlestown.

Then the women go forward, marching with heads bowed into the police. The police ram back. Many mothers are caught in the pushing, others are cut off on a side street. Then the police let them through, and they walk to a nearby park that used to be a civil war training field.

One policeman said, "These kids want bloodshed. Did you see them egging their own mothers on? They say, 'Would you push your own mothers?' Of course I wouldn't push my own mother."

Outside the training field, the kids set off firecrackers, which stampede the horses, which then stampede the kids. The confusion sets the mothers and children scurrying. Inside the training field Pat Russell addresses the mothers: "We're not in shame. We got through."

That evening the men watching the news at J.J. McCarthy's bar on Main Street are surprised that Channel 5 shows a mother being dragged screaming and a kid being shoved against a car by the police. They are still bitter that the previous evening's news said Charlestown was calm. Eddie Prendable says, "The police commissioner can say, 'Take a piece out here, a piece out there.' I think they all see it before it's put on TV. They say 'take a piece out here, a piece out there; just show the good parts.' They figure if anyone sees Charlestown going wild, they will lose. What's there, they should show."

Later a group of teenagers gathers across the street from the high school. The cops won't let them hang out on their own corner, which is right next to the school. Nellie has been attending the high school. "I went to sit down today and the nigger pulled the chair," she said. He said it was his seat, but "in typing class there are no permanent seats." Nellie forgot about the whole thing but "the niggers went to the principal and said I called them nigger and started it. The teacher stood up for me. The nigger kids said it was because she was white. When the principal found out it was the niggers, he said, 'oh well, it's only the second day.'"

Another girl points to the school. "Look at it. It looks like a coloring book. It looks like a jail."

"Don't put it down! Don't put your town down!" her friends say.

"It looks like a coloring book," she insists. Big bright gray splashes of paint, covering graffiti, dot the dull gray wall of the school. The kids love Charlestown more than they love its high school. Many of them go to Catholic schools, and many of the other kids on the street went to English or Technical. Anyone who can go to a better school, they say. "It's a silly school to want to integrate anyway."

"Forgive us our trespasses as we forgive those who trespass against us..." The mothers are kneeling and praying quietly Thursday in a little garden behind St. Mary's, where three white statues of children kneel to the image of the Blessed Virgin. Outside the garden, in the same hushed tone, a teenage girl says "Call the pigs and we'll fucking kill you.... Someone's going to get killed. Maybe that is what is needed, for someone to give their life."

Soon the mothers are marching again, picking up their pace, singing "Auld Lang Syne," reciting the Pledge of Allegiance. They sing, repeating each line:

The worst law
I ever saw
Was passed on down
By Garrity-God
He said to us
You will be bused.
We said to him
Hell no not us!
While in the starr

(Continued on page 24)

Hanging Tough

(Continued from page 22)

We was only a few
But after each rally
We grew and grew.
For those of you
Who call us racists
You can send your kids
IN OUR KIDS PLACES!

Sometimes it seems that every time something good is done for Charlestown, it twists so it doesn't work out right. The new Kent elementary school at the end of Bunker Hill Street is attractive, but people who live a couple blocks away were integrated out of it. Charlestown was recently promised a new high school, but now black people will get to go to it. Urban renewal projects came, cleaning up part of the "oilies" by the river, where people would swim among the oil slicks by day and drink and sing "God Bless America" at night. New housing was built in Charlestown, but some townies got renewed out in the process. Charlestown had many longshoremen. The Charlestown Navy Yard closed. "The dock is containerized — no more work for townies there," said one man.

Charlestown is only about one square mile. People refer to it as "the town" — "because it is." Its streets contain not only the drab project but many beautiful houses. The narrow, winding, hilly streets give the townies the same advantage as the Revolutionary soldiers who fought there on their own turf against the invading Redcoats. In addition to Bunker Hill, it has many local monuments, including a house haunted by a general who died at Bunker Hill and who (according to local report) rides again every June 17th. Old Ironsides rests in Charlestown's waterfront. Charlestown was burned to the ground during the Revolution, a fact some local residents have taken to mentioning lately. "Charlestown people are romantic. They've got an idea of themselves as heroes," said Jack, a young man who grew up there.

"Kids who pull off a bank job and have a lot of money become heroes," he noted. "You're in an occupied town. Charlestown people have always had an idea of themselves as rebellious." Great stress is put on "sports and close knit gangs. Not to do it would be considered crazy. They've grown up with stories about how dedicated so-and-so is. I've seen guys charge guns in a fight rather than not help a friend. It's like Sparta. Getting beat up is no big thing. Losing a fight is no big thing. But letting someone bully you! They're being bullied."

Among the local legendary heroes are the Loopers. "They stole cars, and told the police what they'd done, and where they were. Word would go around, 'the Loopers are going to come tonight,' and people would line the streets. The police would charge them." The Loopers were romantic heroes because they were "not only saying, 'I'm going to do something,' but 'This is what I'm going to do. Stop me.'"

On Friday cops on the street were talking about two cartons of dynamite missing from a local armory. Kids on the street were talking about too many nights with too many cops on the street. Tonight would be the

'There's no day. There's no time.
Time is limitless. There is nothing.
You just wake up, wait for nightfall,
go to sleep and it happens all over
again. There's no day. There's
nothing to do.'

football game. Tonight, everyone agreed, would be a big night. But meanwhile people in Charlestown were still stuck with the day.

Young men were standing on street corners or sitting on the small concrete ledges by the wire fences bordering the project. The monotonous, three-story project looked even more denuded than usual. Several trees from the project were cut down this week to make a huge fire. "We had a little bonfire and toasted marshmallows," one kid joked. They built the fire to lure the Tactical Police Force, and when it came, they pelted the TPF with bottles. Now they are angry that the newspapers said they bottled the firemen as well. Firemen live in Charlestown.

"It's a lie!" a local fireman said of the news story. "When they throw rocks over here, they tell all the jakes to duck."

The Realities of Charlestown

When I asked people of 17 or so what they wanted to be, they answered in the past tense, as though life's possibilities were already over for them. "If I'd gone to Latin, but a nigger took my place..."

"I wanted to be an airline stewardess, but there are no jobs anyway," said Nellie.

"If we were niggers," said one young man, "he'd probably be a fireman, I'd be a cop. They don't take advantage of all the privileges they get."

"Little Teddy's going skiing with one leg," added another. "We're lucky if we see a snow slope. He does better with one leg than we do with two."

"Every day's practically the same," said a young man named Buddy. "You got no future. Put at the top of your paper, 'Just leave us alone and we'll sulk and be miserable in our ghetto. Just leave us alone. Just leave us alone.'"

"There's nothing to do, nothing. There are no facilities. There's one basketball court, a gym you can only use twice a week so you can't get all sported up."

"How do you spend a typical day?" I wondered.

"There's no day. There's no time. Time is limitless. There is nothing. You just wake up, wait for nightfall, go to sleep and it happens all over again. There's no day. There's nothing to do."

Buddy at first told me he hadn't gone to college, which surprised me because he was so articulate and dotted his conversation with literary references. After a while, when pressed as to why he hadn't gone, he said in an angry tone, "I graduated college." He began talking about how he had really, truly wanted to be a marine biologist. But he ended up in college in Boston instead of Miami, which had the program he wanted.

Covering Charlestown, or How Charlestown Covered Me

I went down to Charlestown about four o'clock. I was going to take some general Charlestown-type pictures to illustrate Robin Reisig's story. School was already out and there was nobody hanging around there, maybe eight cops and nothing was going on.

I walked down the hill to the housing project on Bunker Hill Avenue. I went into the middle of the project where people were hanging out, watching a loose game of half-ball. It's really played with half a tennis ball. The only way to throw it is to kind of skip it, and even if you really whack it, it goes about ten feet.

Three kids started to talk to me, about 16 years old and white—the kids you've been reading about. We talked about busing, school, the Sox, where to get good dope. They said it's really hard to get dope in the project. They asked me where I was from, but had never heard of the Real Paper. They asked if it was for or against busing. I said something like, "Nobody likes it a lot." You swallow whatever you believe in situations like that.

I hadn't shot a frame yet, so my camera was still on my shoulder. It's not usually. If I'm shooting I'd have it around my neck. With no signal, nobody saying "Let's get him" two of them pinned my arms, and the

third one grabbed my camera and ran. I had my hand on the strap of my equipment bag, so they couldn't get that.

At least a dozen people saw it happen. At least 20 people saw the kids running away. They went tearing around the corner. Once I lost sight of them, I knew I'd never catch them in the project.

As I got toward the end of the yard I realized that people were kind of standing in my way, and moving into my way. They were mostly teen-agers, about ten of them.

I turned to one of the kids who'd been right there, and obviously knew the kids, and gave him the story: "That's my stuff and I don't have much money and that's the way I make my living." I wouldn't call the police and I wouldn't make trouble if they'd just help me get it back. The kid said he'd never seen them before in his life, of course.

I turned to the crowd of people and said, "Does anybody know them?"

They all shook their heads "no," and that's when I realized I was lucky not to get beat up, or to have lost all my equipment. That was the most depressing thing. It was like everybody was in on it. I was an outsider, and they were protecting their own.

—Peter Southwick

He and a friend disagreed over which Boston college he had graduated from, and he said angrily, "What difference does it make what school I went to? I didn't go to the school I wanted to go to." Miami cost \$3,000. "You think my family can pay that?" He wasn't able to get a scholarship and "the money was going to blacks" anyway. Now "I graduated college and I can't get a job because I'm white and I'm a minority."

"We have too much pride in ourself," he said later. "We don't have to beg from people. It should be there." What should be there? "Jobs. Why should I have to beg for what should be there?"

Charlestown people are too proud to complain to the media if they're beaten by cops, said another man. "They take their whacks." They didn't go after federal programs like Headstart. "We're not niggers."

They talked of how Charlestown kids do armed robberies, emphasizing it was of banks, not people. "You don't read in Charlestown like you do in New York of somebody being mugged and held up for a wallet." Charlestown people, the man told me proudly, didn't rob in Charlestown.

"A year ago almost every store was robbed," someone else disagreed.

"That was little kids who don't know any better," the man insisted.

"Yeah," his friend agreed. "You don't shit on your own doorstep."

"No one ever really moves out of Charlestown. Something about the town always brings you back," said Jack, who had travelled during the last few years. "It's very close knit. You can depend on other people."

Another man gave an example: "You can be having a fight or you can be drinking on the corner and a lady says 'Your mother's coming, watch out, your mother's coming.' They take care of you."

"You could be doing something," another kid says, "acting up, causing a little trouble..."

"Breaking in some cars."

"... someone'll slap you and send you home. You get home, your mother slaps you again. She already heard about it. They never send for the police."

"A lot of people are happy to hang on the corner. It's why people don't progress." Jack said later when we talked alone. "For townies, there is nowhere else to go except Charlestown. Education stops somewhere. All your old friends are getting old with you and you're still doing the same things. You can see guys 40 sneaking out from their wives having a beer with guys 20. There are many miserable Charlestown wives because guys think they never grew up and are hanging on the corner at 35."

"There is more anger than before. People were more content before. There's less money. Now it's coming home that you have a fine community but there are other things beside Charlestown. No matter how bad things are there are always the niggers who had it worse. Now there are no jobs and people are realizing they are as bad off as the niggers they are always putting down."

"Nobody sort of excels at anything in Charlestown," Jack said when we were with the group. "They're not great lawyers. They're not living in fancy places. Sports becomes the relief. When people are yelling, 'Here we go, townies, here we go,' townies are not just the team, they're everybody."

"Tonight, they're not going to break us up," says another man. "They can hit us with all the clubs, we ain't going to feel them, we'll be so stiff."

It had been raining for hours while we talked, standing under the shelter of a second-story bay window. When "tonight" came, it was still raining. No one was out on the streets. But the game was still on. It was a community, not a high school, team, and it played a great game against a team with a few blacks on it. Several dozen townies came to the field and stood in the rain under the glowing red neon-topped tower of the Schrafft's plant and watched the Townies play like hell, sloshing exuberantly in the rain.

Saturday more than 100 people were milling in front of the high school. The policemen

preventing access to the school had receded. The kids in the street were taking careful aim. Quite a few hit the high school's third story window, but most just got singles or triples. The third story is a home run. Saturday was the second day of Charlestown's second annual halfball tournament.

Halfball is a Charlestown sport. All you need to play is a mop handle and a hollow, white, bumpy rubber "pimple ball," cut in half. Pitching is activity akin to throwing a frisbee.

The 31 teams range in age from teens to 40s. Charlestown's hilly streets render stickball impractical. Halfball is not widely played, but it is so much taken for granted in Charlestown that when I said I didn't know what it was, someone said I couldn't be a city kid (from Detroit), but must come from the suburbs.

That night kids gathered in the streets. Since Friday was rained out, "tonight's going to be a double-header," one 14-year-old told me gleefully. But there weren't enough people around to do much. They were anxious to talk, and by now their anger had a focus. They talked of "getting even" — for grievances that didn't even exist a week ago.

One kid said ruefully, "Colored people are laughing at us. No colored person was hurt. It was whites verses whites." But most just told story after story about cops. A cop wouldn't let one kid walk toward his house, and pushed him, and pulled out some handcuffs. "I said to hell with you and pushed him back. A hockey stick and bottle were in my hand so I threw them." Several cops kicked and hit him in reply, he said.

"Old ladies used to sit on doorsteps. The TPF would order them, 'Get in your fucking house.' That's invasion of civil liberties, isn't it?"

The spirit of fighting the cops had changed from a sense of duty expressed earlier in the week ("It's their job. Just like it's our job to resist them") to burning anger at their "taking away things you had all your life." On Saturday one man talked about "a guy 70 years old sitting on his steps on a nice September day. The cops said, 'GET IN YOUR HOUSE!' He didn't understand. That's a sin. That's not America. He went into the house, and know what he said? 'Dirty Nigger bastards.'"

The same themes were echoed Monday night at the monthly community meeting with the local police.

"It makes us look like animals" not to be allowed near the high school. "Snipers on the roof of the high school! Are we Cicero or Chicago or what?"

"I was standing outside my house waiting for my daughter," said William Sullivan. "The TPF started yelling all sort of vulgarities to the women. They put their dogs on me and my neighbor. I was standing on the corner not doing anything. I been standing there for 30 years. It looked like the Gestapo. I thought we were back in Hitler's time. For crying out loud, you'd think we were animals, for crying out loud."

Capt. William MacDonald patiently replied that the "snipers" were stationed in response to rumors of people with guns in the community, and that the police did seize a shotgun, that last year the police had a low profile and buses were stoned, but this year the buses were safe. "You should be proud no kid going to school in this town was hurt."

But somehow, for me at least, the idea that no one was hurt is not the image that lingers. I remember Buddy talking of what he had really wanted to be, and of the city he loved, as we sat in the sun watching the halfball tournament. "No one gives a shit about us. No one gave a shit about the South. Next it'll be the suburbs, telling them where to go to school, where they can work. Five, ten years ago I would have wanted to raise a family here."

"You can't reverse it — it's like a sports game that's been \$10 for a long time, you lower the price, people still won't come. The city's lost its best people. The immigrants all settled here. It was a melting pot."

But the ethnic groups never melted or mixed together, just as they won't mix with blacks now, I said. Charlestown never really melted into the pot.

"It's a stew then" said Buddy. "Blacks would go to the North End festival, people would come here for Bunker Hill Day." Now Charlestown and Southie were the last strongholds, fighting for everyone.

"Do you think the mother's march will have any effect?" another man asked.

"No," I said.

"That's why the violence," the man replied triumphantly.

"But what effect does the violence have?"

Buddy replied: "At least it will tell people around the country Boston is dying slowly, and no one is coming to our aid."

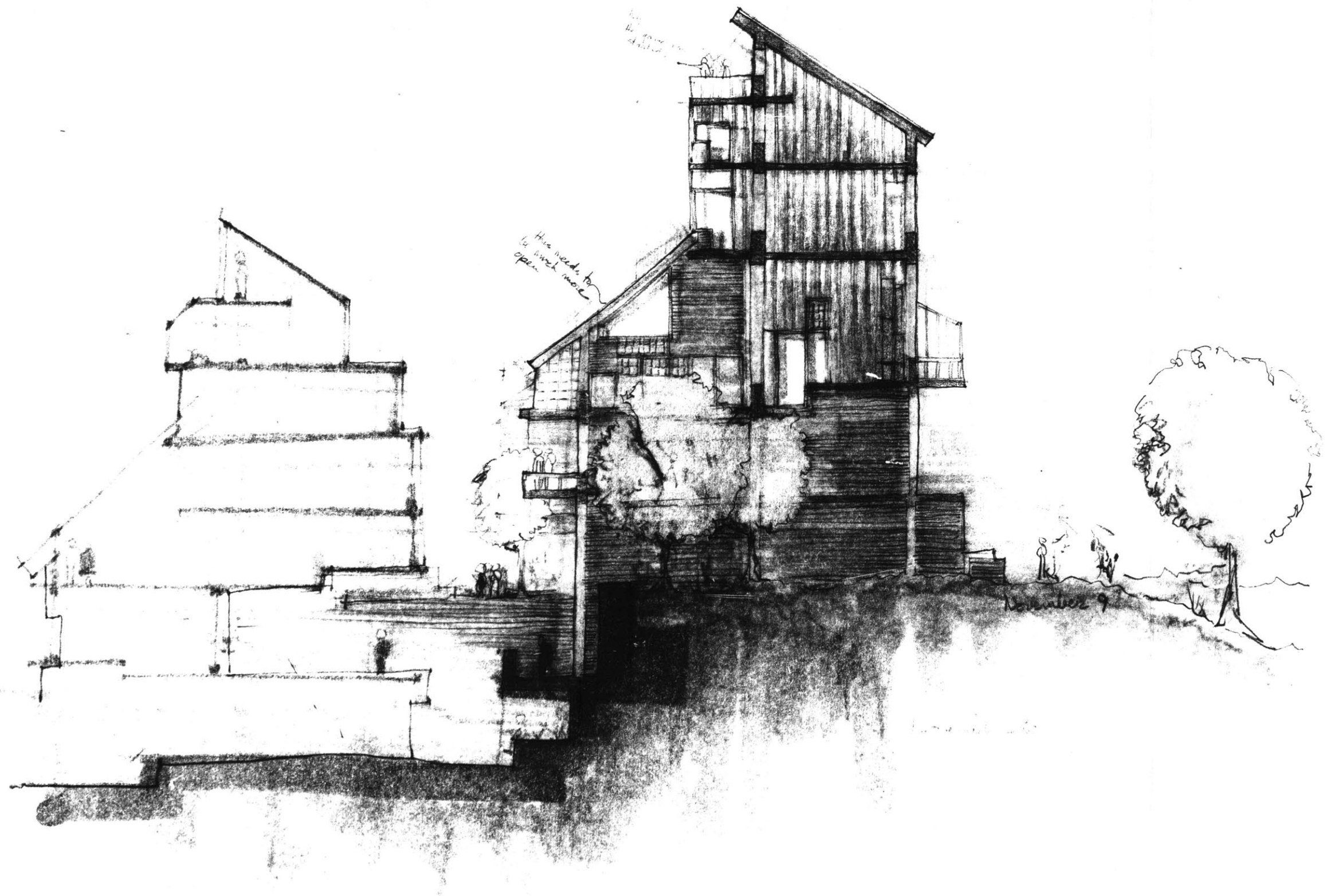
5. IMAGE MAKING

In the Process of Form Generation one central image became the focus and the source of information and energy; the urban high school as a 'Village'. This image became a qualitative and physical reference throughout the project.

The concept of 'Village' has several important characteristics that I tried to incorporate into the design.

1. The distribution is the collective form and is the armature.
2. The distribution is readily understandable, and public.
3. The network is able to grow.
4. There is a range of densities.
5. There is the possibility for both aggregation and autonomy of uses, people and zones.
6. Privacy and view are gained by moving vertically.
7. A tower or flag often marks the special locations.
8. A village often has several types of street-scapes.
9. The physical characteristics respond consistently to the forces of Sun, Wind and Ground.
10. The physical characteristics differ relative to their edge, location and use.

Although the image making had importance for me in the process of form generation the final test would come only through use of the place; only then could we know if it has added to the way the place will be experienced and used.



6. PLACE MAKING

My process was to schematically organize the whole site and the whole program and then to move in close on one region to design in close. This section will cover the general organization of the whole place and the documentation of the designed region will show the 'in close' design. Organizational modelling.

There needed to be ways through the site and following the rule of having the major distribution along the contours the major distribution was set up. The main entrance to the school was made on Polk Street 1/3 of the way up the site. I felt that it was important to start by getting into the center of activity rather than access off Medford street and have to climb up into the school. As the Auditorium, Administration and Community facilities such as the cafeteria, guidance, merchandising and music are very public functions they are associated with the main entrance. It also became my intention that the main distribution and entrance be very continuous with the auditorium space so that it might serve as a waiting and group gathering space for students and visitors.

There was also the need to bring some of the ground in from the South in plan as well as in section.

The high school students need a harbor for their own explorations and the community needs a resource that is comfortable to return to and use after graduation. In a general organizational way I dealt with this problem by having the community facilities within immediate range of the street

and built above that ground would be the 'houses' and the academic and social institutions.

The organizational modelling was also based on the programmatic requirement that the school be divided into 'houses'. I wanted to strengthen the students identity with the house by making them visual and that seemed best accomplished by making them vertically organized. In the massing model they grow up out of the ground of community facilities.

The massing model shows the way the whole site was organized. The auditorium roof is the upper level 'ground', there is a bridge connection to the P.E. Facilities, there are distinct regions of each house and there are upper distribution networks that connect the academic spaces.

Having established this much of the organization intentions It was the moment to move in and start working on a region and in that process one must decide on the structural system and how it is deployed and the infill.

9' high
didn't get mine
though we had

EXHIBIT BOARD
Media & Spec Brown
Red
Community CENTERS
Distribution Yellow

Medford

Street

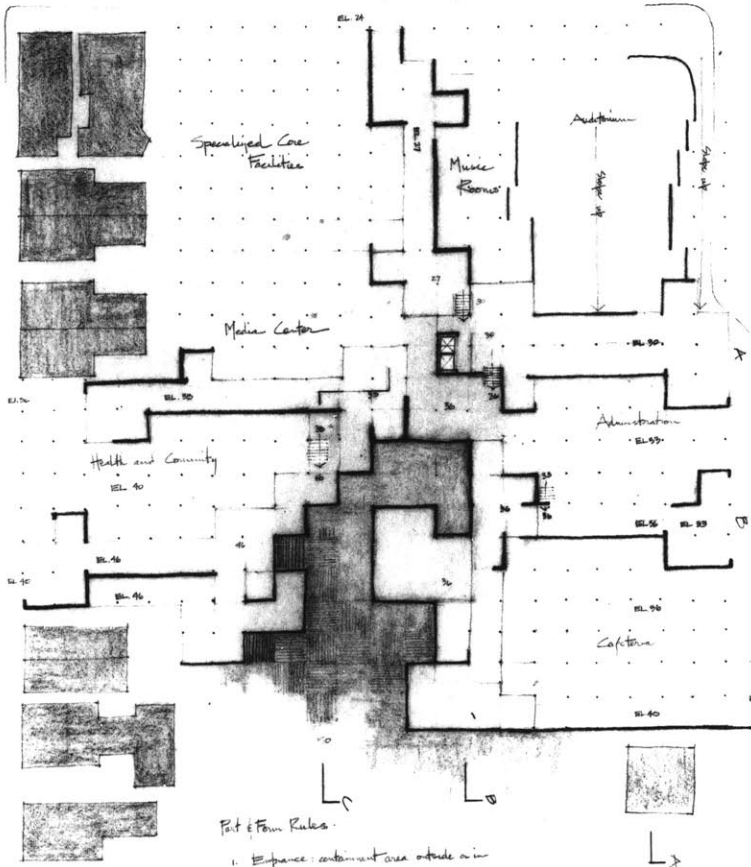
Elm Street

Cars

Elm Street

Street

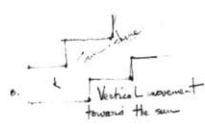
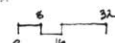
PEOPLE



Put & Form Rules:

1. Entrance: containment area outside in
2. Direction across slopes up or down slopes
3. Containment back into slopes
Small areas for bathrooms etc.
4. Division that there be small vertical dimension for movement but soft side goes major continuity down slopes
distances dimensioned between nodes or fire distances
if more than across the use dimension should remain constant but continuity up could be greater through additive
5. Ends th and must be different from the middle
6. Change in direction must have a different quality

Oct 15, 1975



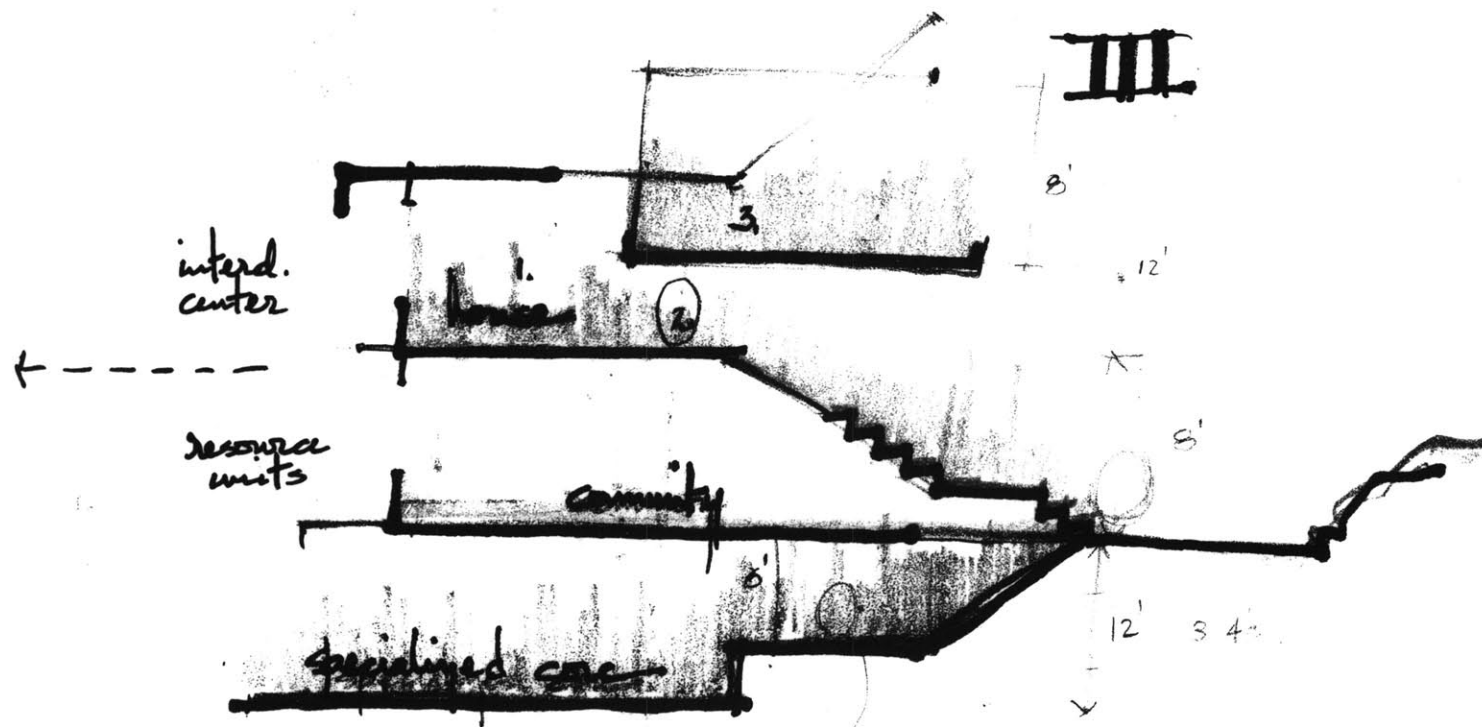
The pieces should vary by where they are on the site

distribution and
ground use

Sunday Oct. 5, 1975

AM before blustery afternoon on Cohasset rocks

5.

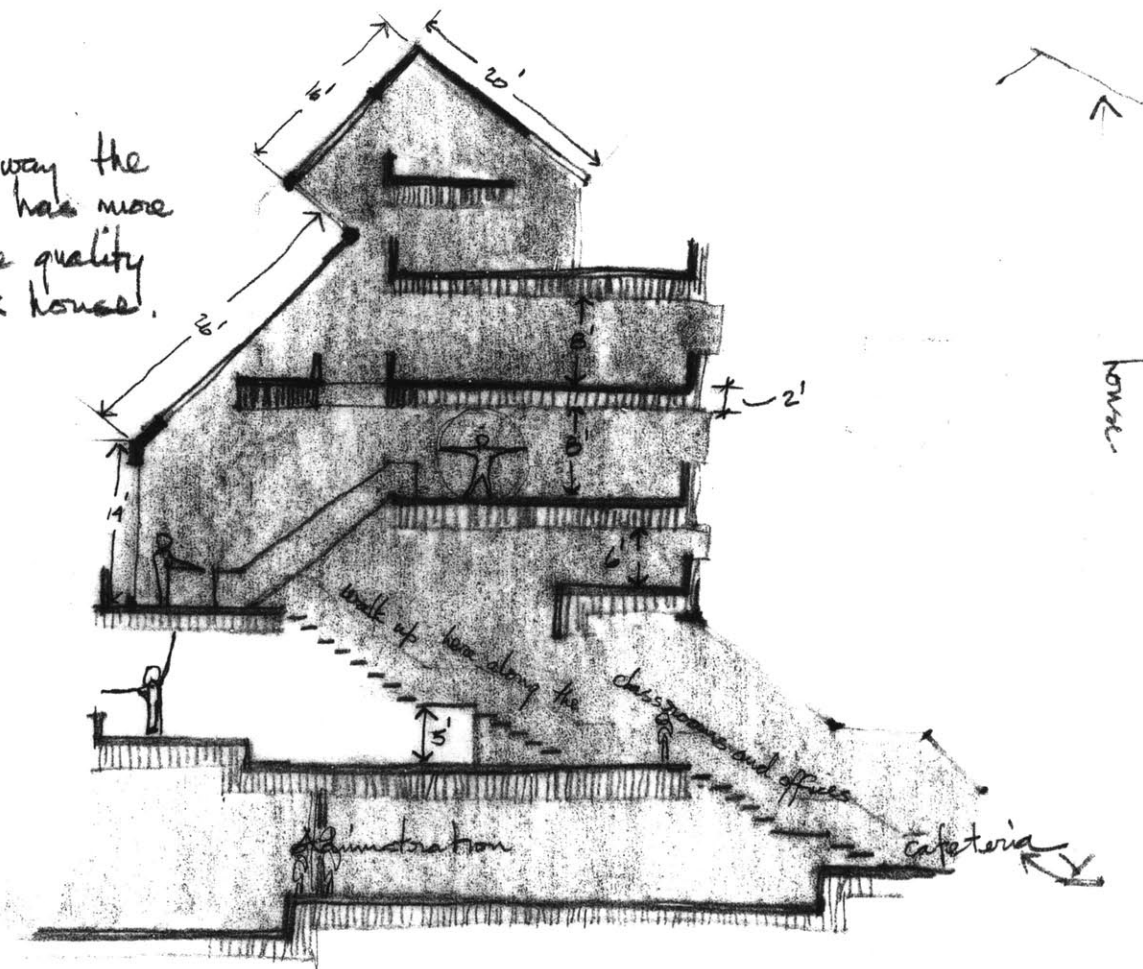


GENERAL SECTION

VERTICAL ORGANIZATION

this way the place has more of the quality of A house.

ROOF = ENCLOSURE
VERTICAL CONTINUITY







Structural System.

The two major determinants in choosing a structural system were my attitudes toward change and building process. Change requires that in a school the framework enable shifts in use and meaning, alterations in the primary system to accomodate large shifts in use or new use, and growth of the system. Thus I wanted a system that would have enough built definition to enable the small shifts in use, obvious hierarchy of parts so that larger shifts could be made and enough cues given so direction and form of growth would be obvious. My attitude toward building process is such that I wanted to choose an additive system; that is one where each part has a life of its own and thus the putting together of the parts adds up to something. There are very few secrets in a building system of this nature.

So I chose to work with a precast system of columns, beams and joists or purlins. The flooring would be poured and could be broken through in places between the purlins if large change was necessary. The infill materials would also be additive parts; block for the mechanical shafts, brick for the infill walls in the framework, and steel and glass in the light panels.

When assembling the structure there were a number of important issues: SIZE; what are the sizes of the use spaces? the uses? DIRECTIONS; what are the major ways that people will move through ? the site? the building? CHANGE; at what levels can people affect their environment? MECHANICAL; how will the mechanical run and how can it be used as spatial definition?

LIGHT AND AIR; how will the structural organization help define the attitude toward light and air? FEELING; how will the materials be deployed in order to establish certain feelings and qualities?

SIZE

Small is 4' x 4' which is some order of built distribution piece where two people can sit alone or which can be claimed by adjacent locker owners. This size will be built out of brick in most cases and when associated with the mechanical shafts it will be block.

Medium size is the defined areas that are associated with the distribution. These are sometimes bathrooms and other times they are built alcoves for small group gatherings or for locker clusters. This will be built also of brick or block but may also have some linear elements of wood frames, sometimes glazing and often there will be wood on the seating elements.

Large is 16' x 22' or 22' x 24' where large groups of 20 to 30 might gather for classes or meetings and it can be combined with another. This size will be and is defined by the primary structure of the grid. The grid has bays of 8' x 22 and 16' x 22'.

Largest is on the order of 66' x 66' which is the small auditorium. This space shall be built of a special system and will incorporate the large precast elements that are associated with the distribution and the balconies.

DIRECTION

The way that the structural framework is designed and deployed have to

establish the main directions through the site and the building.

There need to be some large structural moves to establish the primary distribution. These will be accomplished through the use of a special precast element that has the associative qualities of the Japanese hand and also serves to support the balconies in the auditorium. These can be seen in the photographs of the model. These establish the direction along the contours. At the point of bus pick up they also serve as a bus stop.

The grid was established so that there would be a 8' x 22' bay size that would be associated with movement of people and as it happens mechanical.

CHANGE

Within the primary framework of concrete and masonry there will be a system of wall panels and light infill that the inhabitants will be able to change easily. The framework itself can be altered by trained people and the ways will be defined by the location of the structural precast members.

MECHANICAL

There will be a central supply of water, air and electricity. The feeds to the building will be in mechanical vertical columns which feed out in the direction of the 8' x 22' bay.

I have used the large dimension of these vertical 'columns' to build a diagonal direction in the distribution. And they are also elements off of which other definition might grow building up into a 'rock'.

LIGHT AND AIR

The structure is assembled in such a way as to keep all use spaces within 24' of direct light and often

24' of direct light and because the sash will be operable there should also be adequate natural ventilation.

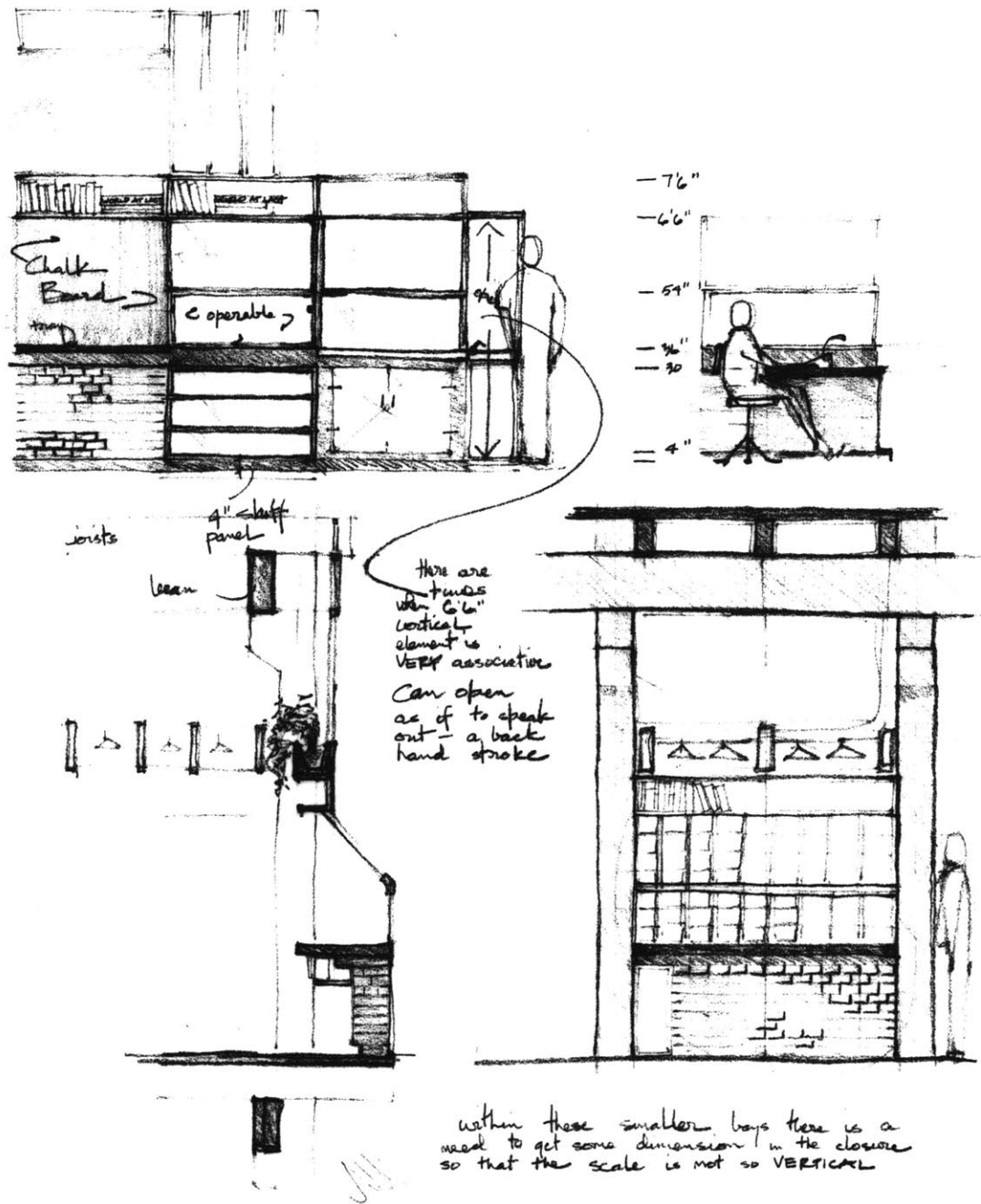
FEELING

It is my desire to use elements so that the additive quality of the way the place is built will add a certain lightness to the place which would be missing if it were poured in place. Glazing will be held in wood and steel frames and the wood will remain natural in color and the steel will be painted.

I want the place to be firm and yet warm and light.

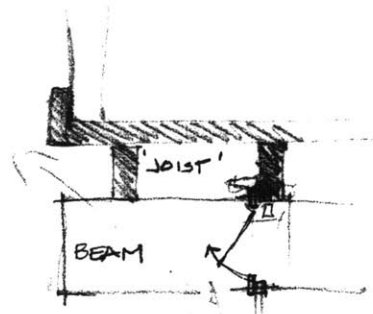
Infill.

The infill must express the uses that are associated with it.

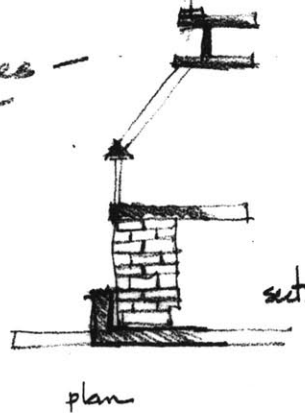
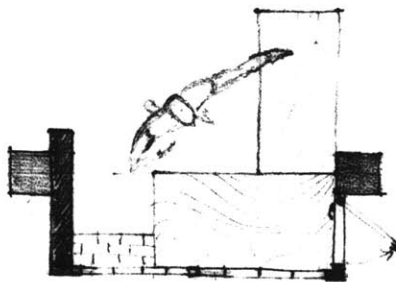


INFILL

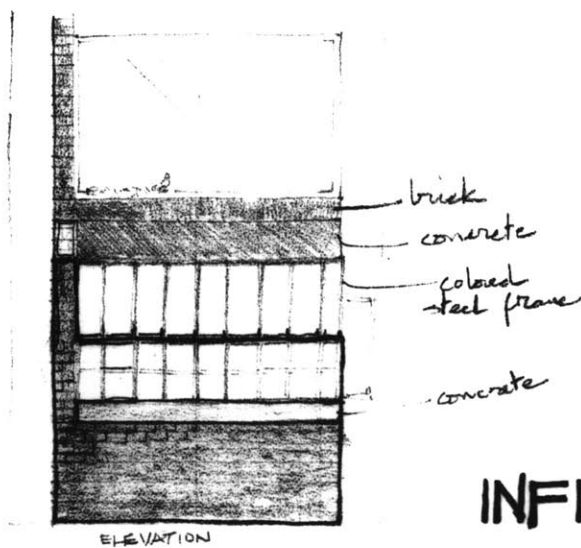
ALL PIECES MUST HAVE
A LIFE OF THEIR OWN.



to use brick up above
need to make the differences —
that brick is **ADDED**, not
structural.



justify to left



INFILL

Infill; glazing and facade.

Where there's a use oriented place always maintain the 36'' height in some way; by a break in the glazing, by the end of a concrete or brick 'wall' or by a use surface.

Very vertical panels of glass, with an operable peice at the 36" height shall be associated with spaces where people will be directly in contact with the edge while they are standing.

Movement will be accompanied by glazing that is very stacato.

There should always be a break in the glazing at 6'6" as some scale from which all other derives.

In spaces where the ceiling is very high, 12' from the floor, the break at 8' in the glazing should also be associated with some lighting elements that will scale the space down in small areas.

There shall never be less than 1/3 glazing in any one . bay. In most cases there will be 1/3 which will be solid up to 8' and the other 2/3 will be filled as is deternined by the uses associated with it.

The materials of the infill are concrete; there will be a poured lip at the edgeof any floor slab, brick, wood frames, steel frames for large glazed areas and glass. In most cases any solid infill over 8' above floor height will be panels of green, blue and orange.

Form rules and intentions.

Entrances should be continuous with outside and inside and as one moves in one should have some understanding of what is to be inside.

All elements of movement and of building should have an essential direction. Major distribution shall be along contours.

The ends of things must be different from the beginning or middle and similarly for the beginning and middle.

Vertical movement should be toward the sun whenever possible.

All elements shall be mutually informative.

Distribution shall be built so as enable a large range of uses and thus the built form shall legitimize the importance of the activities that go on outside the classroom.

That there shall be superviseable edges where the students can be associated with both the city and the school.

I have tried to load up the distribution at the edges and so as to provide a 'front porch' where there is public distribution associated with the street and with the administration offices.

Any space should enable a wide range of human association and use.

Partial is more.

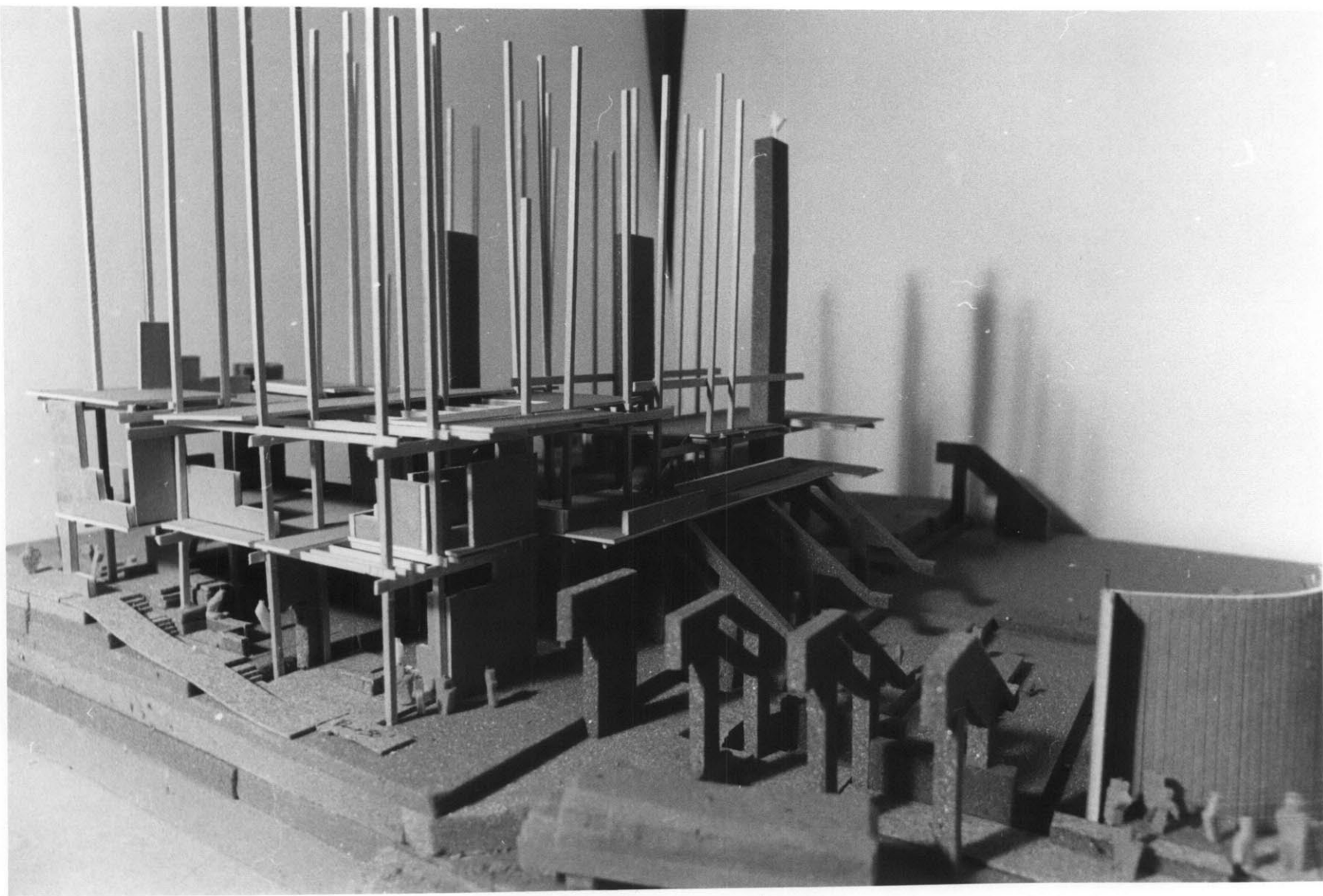
7. DOCUMENTATION

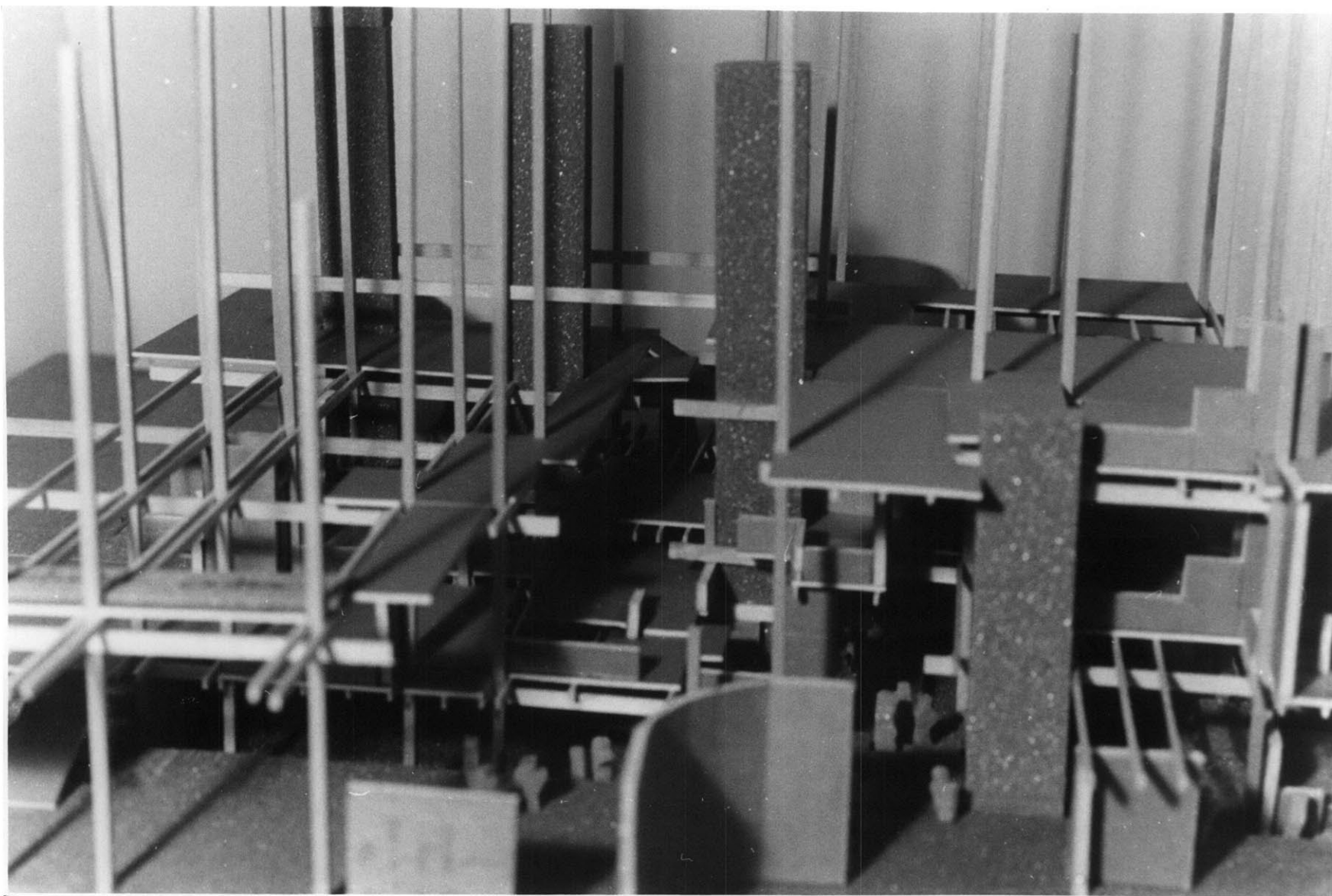
The two photographs of the partially complete model of the designed region illustrate several important aspects of the design:

The first one that is a shot from the North east shows the relationship between the auditorium, in the foreground with the curved wall, and the major distribution. At the ground level the main entrance is to the left of the last large precast element and the 'main corridor' moves along under the main precast elements. There is also major upper level distribution that moves along on the top of the precast elements behind the auditorium balconies. Also clear in the model at this stage is the importance of this Polk Street edge. Near the Auditorium and the main entrance the elements form an arcaded bus stop and up along farther there is an arcade associated with some community facilities, the gallery display area and at the far left the student merchandising store. This edge is meant to be a place to hang out.

The second photograph is taken from the South looking North. It shows the major entrance to the 'house' that I worked on and the major distribution up through the 'center'. The access to the house is from the right. In this model photo one can also see the mechanical shafts and the way they set up the movement.

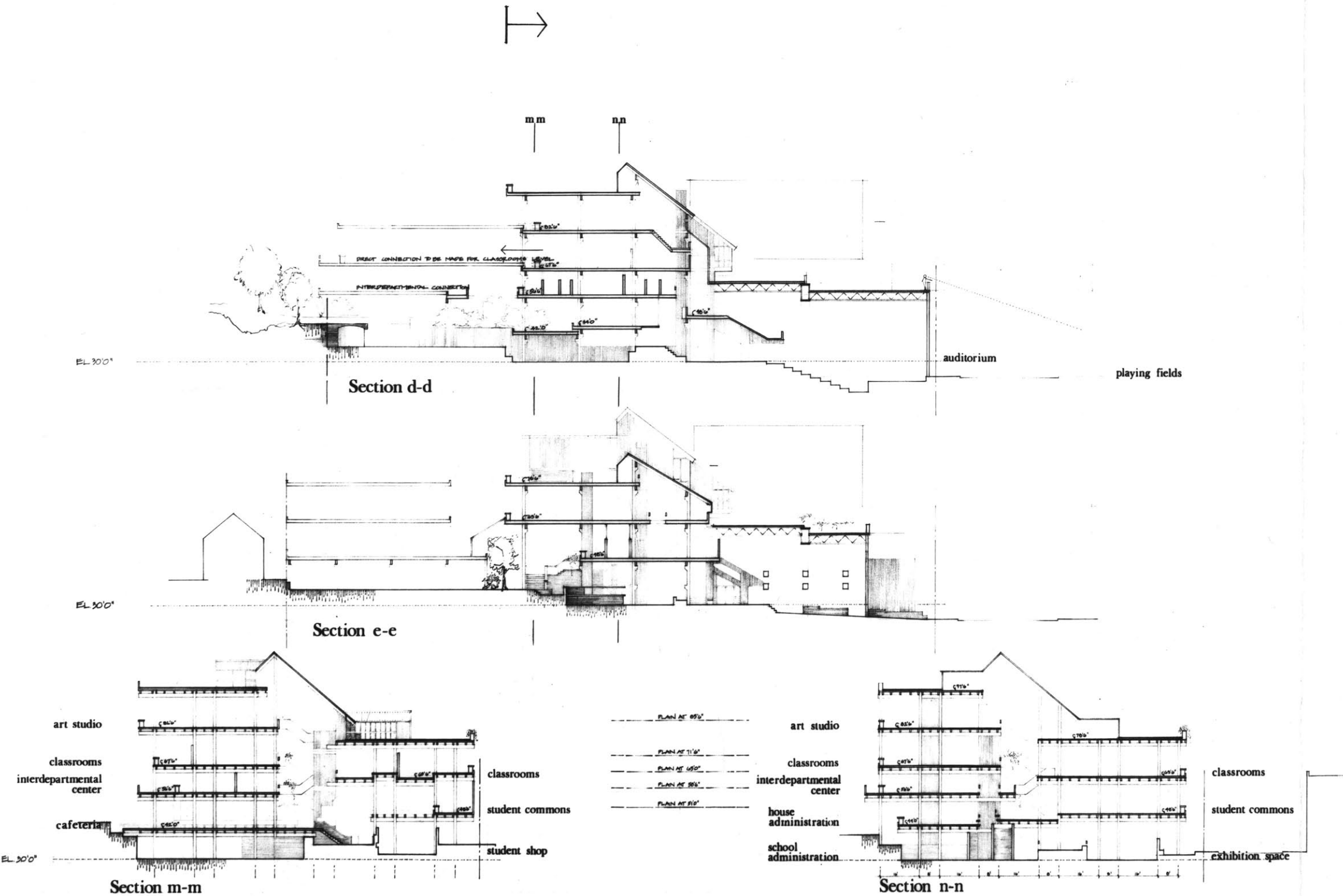
In both of these model photographs what you see is the structural framework and some infill at the edges.





Design for a Region of Charlestown's High School

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 MIT
 M.Arch. Thesis
 January 1976



Medford

Street

Street

Street

Elm

Polk

BUNKER HILL
CEMETERY

COMMUNITY FACILITIES

PROPERTY LINE

GROUND

CAFETERIA
EL. 32'0"

SERVICE
FOOD PREP

24 HOUR
PIZZA PLACE

STUDENT
SHOP

EXHIBITION
SPACE

SCHOOL
ADMINISTRATION 34'0"

MEDIA CENTER

OUTDOOR
TERRACE

MUSIC DEPT.

SPACE ROOMS

AUDITORIUM

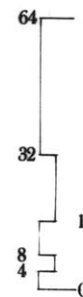
EL. 28'0"

EL. 30'0"

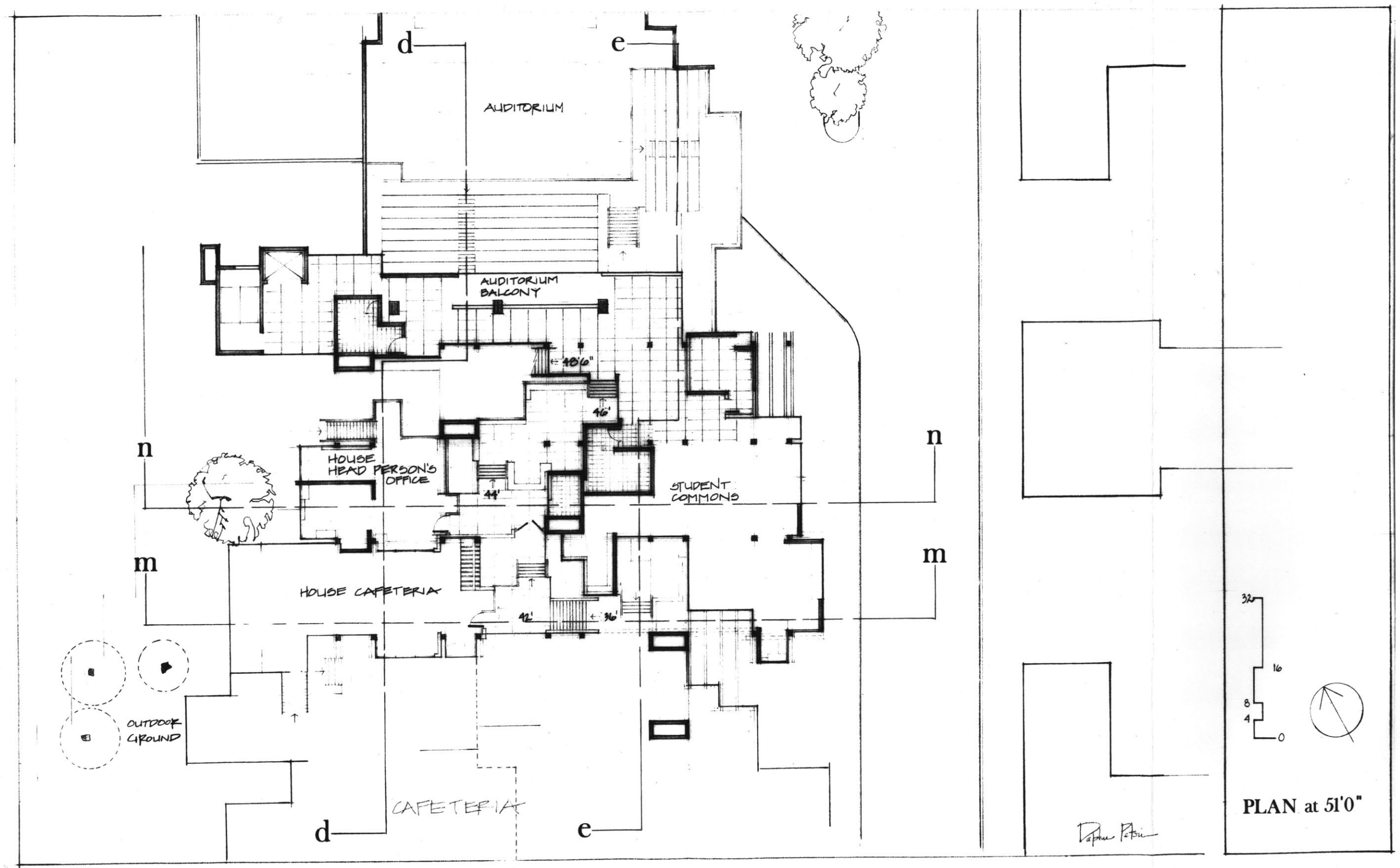
EL. 36'0"

Design for a Region
of
Charlestown's
High School

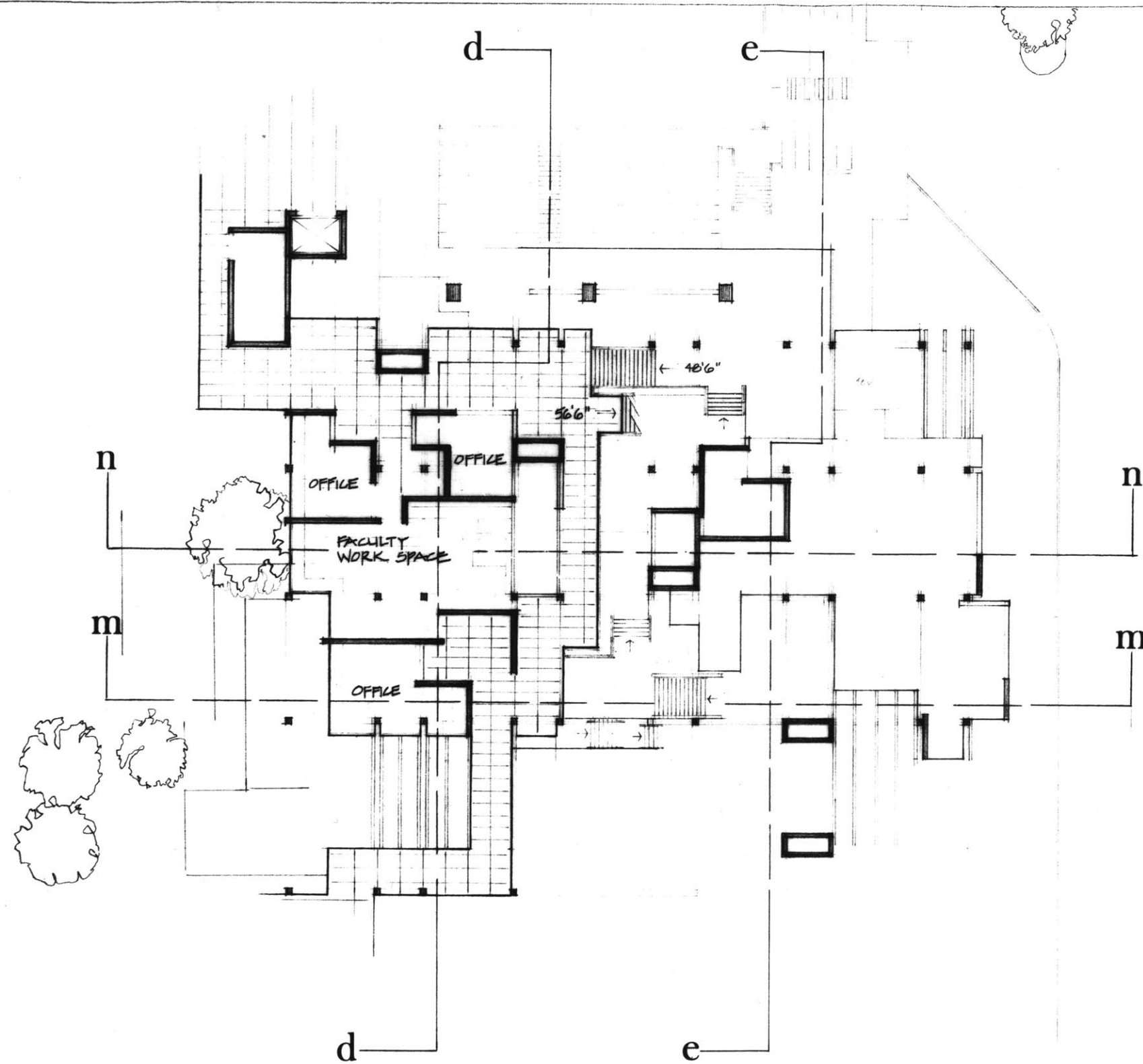
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M.Arch. Thesis
January 1976



Plan at 40'6"

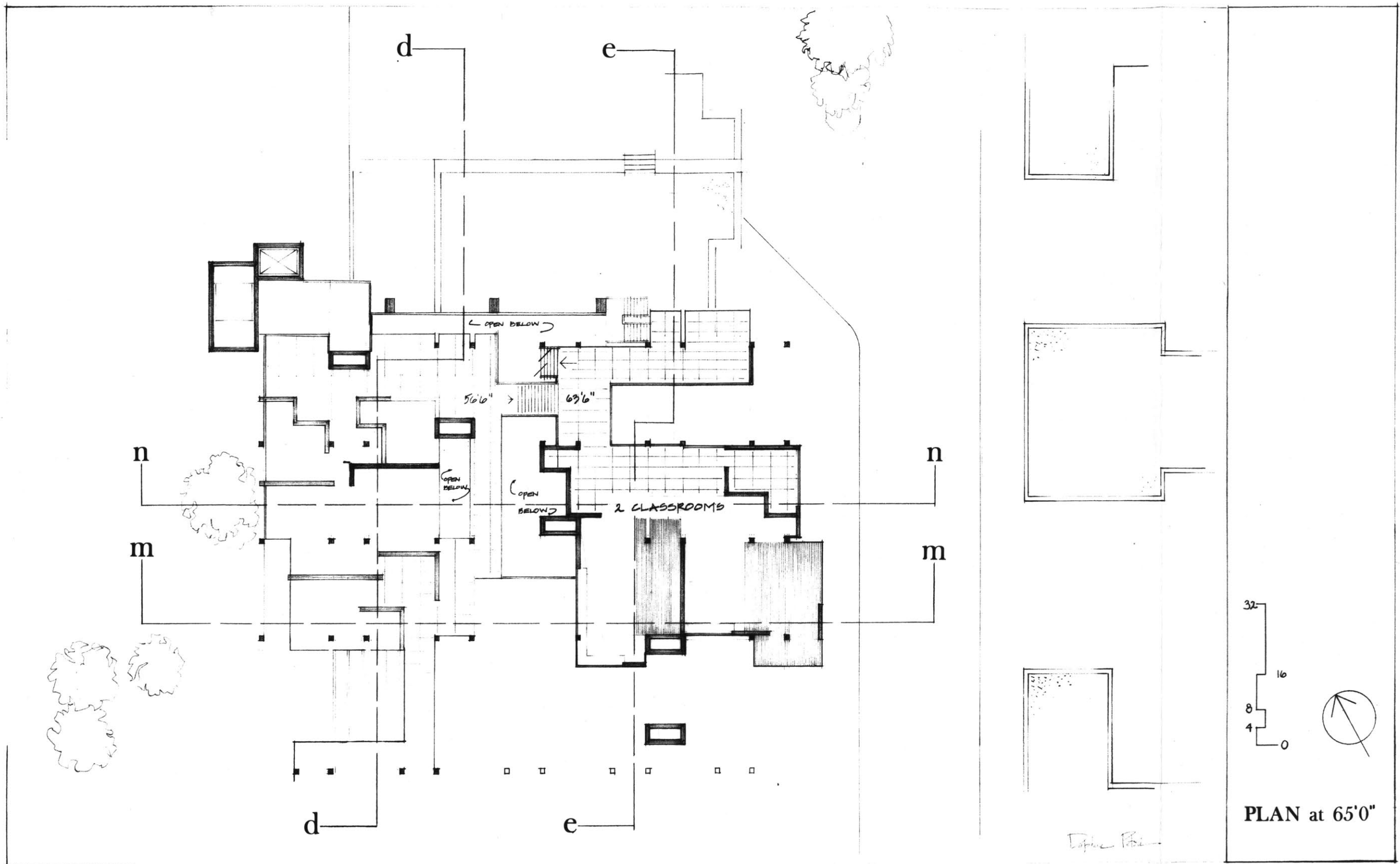


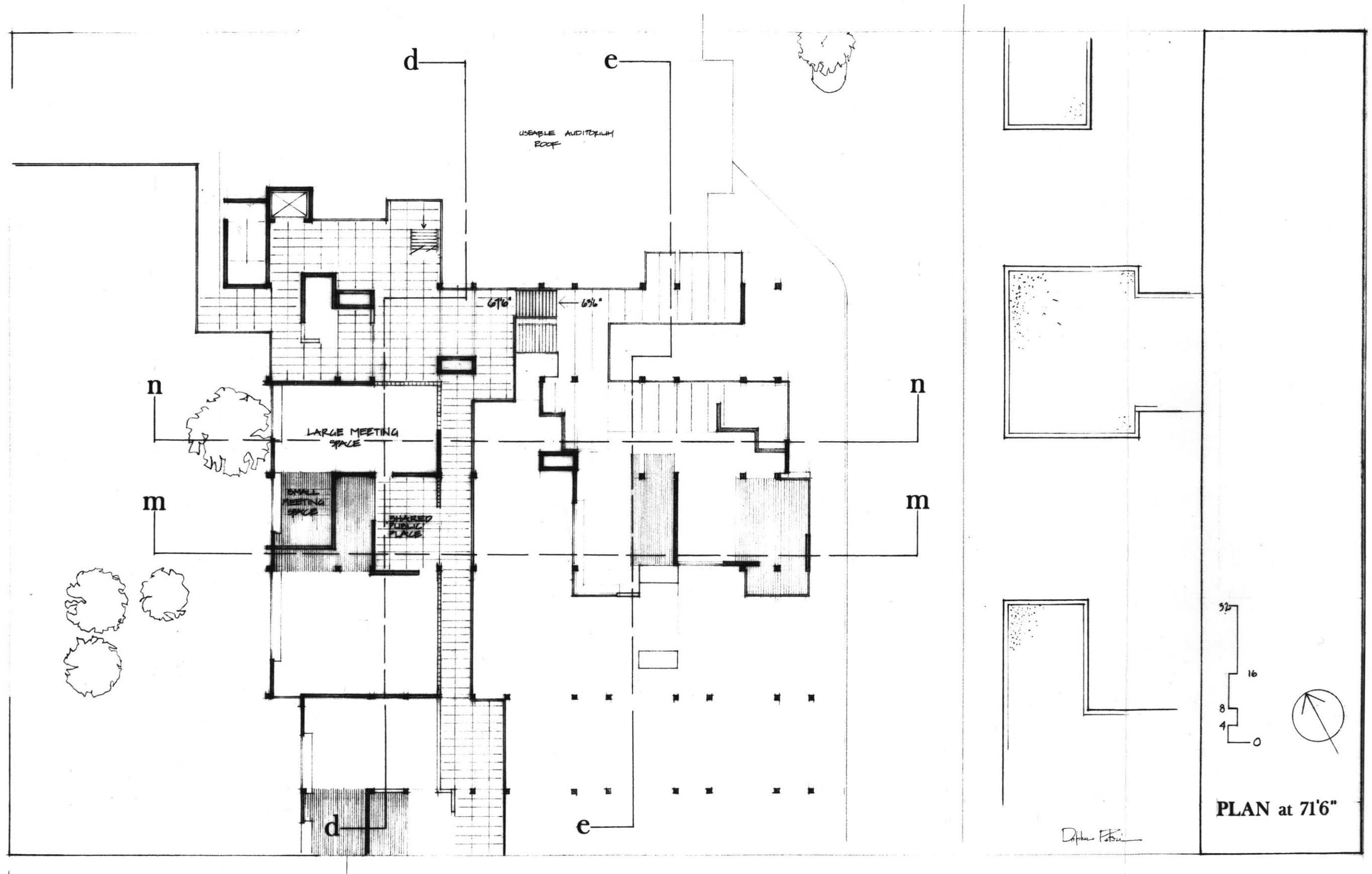
PLAN at 51'0"

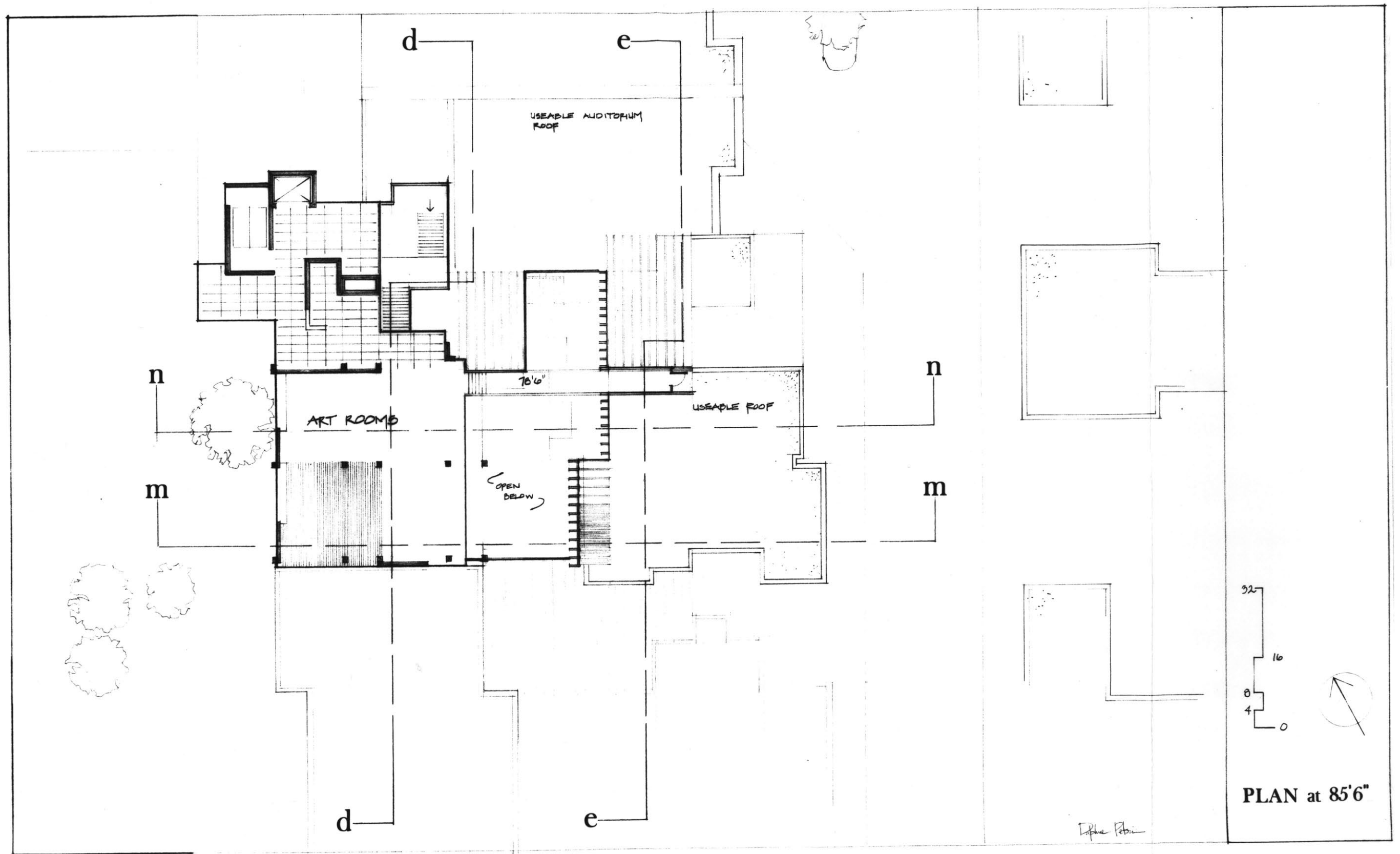


PLAN at 58'6"

Robert R. R. R.







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